

# Municipal Journal

## And Engineer

VOLUME XXIV.

NEW YORK, JANUARY 8, 1908.

No. 2.

### NEWPORT AND THE NEWPORT PLAN

Most Democratic Form of Municipal Government—Text of  
Charter—First Mayor Reelected—Paving—Sewers  
Fire—Police

OF the several plans which have been advocated and adopted during the past two or three years for the government of municipalities in the United States, the Newport plan stands alone in that, while the Galveston and other plans have aimed at a concentration of authority in a committee of five or seven men, the most prominent feature of the Newport plan is the large number in the governing body. This body is called a Representative Council, and contains 195 members, the executive power being exerted by a Mayor and five Aldermen.

In his inaugural address the first Mayor under this new system of government, William P. Clarke, said: "We have a great responsibility entrusted to us. No more democratic form of government was ever tried than this under which we are to work. If we, as city officials, make a failure of this year's work, one of two things is proved; either we are not in any way suitable or competent to conduct the city's affairs under this new charter, or the whole system of government by the people is wrong, for no other city is so completely an example of the American idea of government by the people as Newport is today."

The new city charter was passed April 19, 1906, and was adopted by vote of the citizens on June 6, and went into effect on the first Monday of January, 1907, the beginning of the fiscal year under this charter. It was adopted by a very decisive majority of citizens and all the Aldermen and a majority of the Council elected for that year were known to favor the new charter.

Statements of one citizen or another as to the success of the charter would be very likely to be effected by preconceived ideas or personal prejudice; but the election held December last offers possibly the best indication of the satisfaction of the people with the working of the new charter. It is a characteristic of our government that dissatisfaction with conditions generally is apt to be visited upon the officials in power, without any very close reasoning as to whether they are in any way responsible therefor. In the Newport election last December Mayor Clarke not only was re-elected, but had no opposition for the office; and four out of the five Aldermen were re-elected, the fifth Alderman not being a candidate for re-



HISTORIC  
REDWOOD LIBRARY  
NEWPORT,  
R. I.

election. This undoubtedly speaks well for the officials of last year but, as just explained, it also speaks well for the results obtained by the new system of government.

The almost complete absence of national party politics in the election is indicated by the fact that, instead of there being two, three or four candidates for each position in the Council and as Aldermen, there were five candidates for the one position of Alderman in each of two wards, and two in each of the other three; and while thirteen Councilmen were to be elected in each of the five wards, the number of candidates were twenty, thirty, eighteen, thirty-four and twenty-four in the various wards, respectively. Heretofore the contest for the Mayoralty in Newport has been very spirited, which makes the latest contest all the more significant.

The new charter is as follows, a few sections or sentences being omitted which are of local or temporary significance only.

Sec. 2. The government and control of all fiscal, prudential, and municipal affairs of said city, unless otherwise provided, shall be vested in a Representative Council, and unless otherwise specially provided, all the general or special powers conferred by statute upon City Councils shall in the City of Newport be and hereby are vested in the said Representative Council.

Sec. 3. The Representative Council shall consist of one hundred and ninety-five members to be elected as follows:

At the first election after the passage of this act the electors of each ward qualified to vote on any proposition to impose a tax or for the expenditure of money shall elect thirty-nine members who shall reside in the ward for which they are elected, thirteen of whom shall serve for the term of one year, thirteen for the term of two years, and thirteen for the term of three years; and thereafter the electors of each ward shall annually in like manner elect thirteen members to serve three years, and shall also at such election fill any vacancies that may exist for the unexpired term.

Sec. 4. The executive powers of the city, except as otherwise directed by the Representative Council, shall be vested in a Mayor who shall be elected by the electors qualified to vote for general officers, and in five Aldermen, one from each ward, to be elected by the electors of the city qualified to vote on any proposition to impose a tax or for the expenditure of money. Each Alderman shall be an elector in the ward for which he is nominated, and the nominee for each ward receiving the highest number of votes shall be the Alderman for that ward.

Sec. 5. The Representative Council shall meet annually on the first Monday in January at 12 o'clock noon, and at such other times as they shall adjourn to or by rule prescribe; they shall also meet upon the written request of twenty-five members or upon the request of the Board of Aldermen, the request for such meetings to be filed with the City Clerk.

Sec. 6. The Representative Council shall choose a Chairman from their number who shall preside at their meetings. The City Clerk shall act as Clerk of the Representative Council.

Sec. 7. The Chairman of the Representative Council shall annually at the first meeting in January appoint a committee of twenty-five members, five members from each ward, which committee shall consider the subject of the annual appropriations for the ensuing year and make report thereon at an adjourned meeting of the Representative Council, which report shall be printed and distributed to the voters qualified to vote upon the expenditure of money at least seven days before said adjourned meeting.

Sec. 8. Any vacancy in the Representative Council from any ward may be filled by the members from such ward from among the qualified electors of such ward for and during the remainder of the current municipal year.

Sec. 9. The Representative Council may determine the rules of its procedure and judge of the election of its members. A majority of all the members of the Representative Council shall constitute a quorum for doing business, but a less number may organize temporarily and may adjourn from time to time. All meetings of the Representative Council shall be held with open doors, and the records of their proceedings shall be kept by the City Clerk and shall be open to public inspection. Subject to such conditions as may be determined from time to time by the Representative Council, any taxpayer or voter of the city may speak, but not vote, at such meetings. The members thereof shall receive no compensation for their services as members of the Representative Council.

Sec. 10. The Representative Council shall have power to levy and collect taxes for all purposes for which towns or cities are authorized to levy and collect taxes, and to appropriate and expend the same as they are or may be authorized by law to make ordinances and regulations for the government of said city, except as otherwise provided by law, relative to streets, sidewalks, and highways, and to the ordering of the same to be made, and to mending, paving, cleaning and lighting the same; to landing places, wharves, the anchoring and mooring of vessels, and to injuries and encroachments upon the river and harbor; to the Fire Department of said city, and the protection of said city from fires; to the Police Department, and the security of the city from riotous and disorderly persons; to taverns, cook-shops, oyster houses, and all places of entertainment; to public shows, entertainments, exhibitions and spectacles, and the licensing or prohibition thereof; to the construction, use, and regulation of theatres and all public places of amusement; to the public health; to public burying grounds, and the burial of the dead; to foot or sidewalks in the streets, and to posts, gutters, drains, signs, steps, cellar doors, windows and lamps therein; and shall have power to make ordinances and regulations necessary to the welfare of said city and all other general powers necessary for the government of said city not inconsistent with law.

Sec. 11. The Representative Council shall also have power to inflict penalties for the breach of any such ordinances: Provided, that such ordinances shall not be contrary to the laws of this State and that nothing herein contained shall be construed to exempt offenders from the punishment or

penalty already prescribed by the laws of this State for any of the offences herein described. All penalties provided for by any ordinance of said city shall be forfeited to the use of said city, or to such persons and uses as shall be by such ordinances prescribed; and they may be sued for and recovered in any court of competent jurisdiction.

Sec. 12. The Representative Council at the beginning of each municipal year shall elect a City Treasurer, a City Clerk, a Judge of Probate, a Probate Clerk, a Collector of Taxes, a City Solicitor, one Assessor of Taxes, and all such other city or municipal officers provided for by the laws of this State or otherwise as may be necessary or proper, and for the term provided by law; and they shall also elect from time to time all such officers as may be needful or proper to carry into execution the powers of said city unless the appointment of such officers be prohibited or the mode of their election be otherwise specially prescribed by law; and may provide by ordinance or otherwise for the election of such other officers as are not hereinbefore designated, and shall have power to employ heads of departments and such other officers as they may see fit. They may delegate to the Board of Aldermen the election of any officers not specially named or not by special act required to be elected by the Representative Council.

Sec. 13. The Representative Council shall fix the salaries and define the duties of all city officers except as otherwise provided by law. The salaries shall be fixed before the election of the officers and shall not be changed during the term for which they are elected, but the salary of Mayor and members of the Board of Aldermen for the year commencing January 7, 1907, shall be fixed at the first meeting in January, 1907.

Sec. 14. The Representative Council may, if two-thirds of all the members elected vote in the affirmative, remove for misconduct or incapacity any officer except such as are elected by the people.

Sec. 15. The Representative Council shall have power to delegate to the Board of Aldermen such ministerial powers as are by statute or by this charter conferred upon said Representative Council.

Sec. 16. It shall be the duty of any officer or employee of the city at the request of the Representative Council, in accordance with any general rule or special vote of said body, to appear before it and give such information as it may require in relation to any matter, act, or thing connected with his office or employment.

Sec. 17. A vote of the Representative Council in favor of any proposition requiring the expenditure of ten thousand dollars or more in addition to the regular annual appropriations shall not become operative until after the expiration of a period of seven days from the day of the final passage of such vote. If, within the said period of seven days, a petition be addressed to and filed with the City Clerk signed by at least ten qualified electors from each ward in addition to at least one hundred qualified electors of the city, asking that such proposition be submitted to the qualified electors of said city, the Board of Aldermen shall within thirty days from the filing of such petition submit each question to the qualified electors at ward meetings specially held for such purpose. Pending said period of seven days the action of the Representative Council shall be suspended, and if the said petition be filed then it shall be further suspended until the result of said election be declared, and if a majority of the electors voting thereon approve said proposition it shall become a law, otherwise it shall be null and void.

Sec. 18. Upon the written petition signed by at least one hundred electors qualified to vote upon the proposition therein set forth, filed with the City Clerk, addressed to the Representative Council, and requesting the passage of any ordinance or any proposition for the expenditure of money exceeding the sum of ten thousand dollars, there to be specifically set forth, the Representative Council shall at its next meeting proceed to consider the same and shall before the adjournment of said meeting pass its final vote thereon. If the said ordinance or proposition be disapproved by the Representative Council the said vote shall be inoperative for a period of seven days, and if within said period of seven days after said disapproval a petition be addressed to and filed with the City Clerk signed by at least twenty qualified electors from each ward in addition to at least two hundred qualified electors of the city asking that such proposition be submitted to the qualified electors of said city, the Board of Aldermen shall within thirty days thereafter submit said ordinance or proposition to the qualified electors of the city at ward meetings specially held for that purpose, and if a majority of the electors approve such ordinance or proposition it shall become a law, otherwise it shall be null and void.

Sec. 19 provides that no appropriation shall be spent for other than its designated purpose without special authority of the Council; nor any expenditure made until an appropriation to meet it has been voted.

Sec. 20 provides that Councilmen, Mayor and Aldermen shall be sworn in.

Sec. 21. The Mayor shall be President and ex-officio a member of the Board of Aldermen. He shall have power to investigate all departments of the city and may suspend any city officer for sufficient cause. In case of suspension he shall within five days call a meeting of the Board of Aldermen and lay before the Board a specification of the charges preferred against such officer, and if said board shall not sustain such charges the officer shall be immediately restored to office; but if said Board shall sustain said charges the office shall become vacant unless such officer shall within ten days claim an appeal to the Representative Council, who shall finally determine the matter.

Sec. 22. The Board of Aldermen shall exercise a general supervision over all matters affecting the welfare of the city; they shall form the several committees for the administration of the different departments of the city government, and shall report the condition of the same, together with recommendations thereon, at the annual meeting of the Representative Council, which report shall be published annually; they shall attend the meetings of the Representative Council and give such information as may be required.

Sec. 23. Unless otherwise specially provided, all the powers, general or special, now conferred by statute upon Town Councils and Boards of Aldermen shall in the City of Newport be vested in the Board of Aldermen.

Sec. 24. The Board of Aldermen may determine the rules of its procedure. It shall elect a Chairman who shall preside and perform the duties of the Mayor in case of the absence or inability of the Mayor to act.

Sec. 25. The Mayor and the members of the Board of Aldermen shall receive a salary to be fixed by the Representative Council, and shall receive no other compensation whatsoever for any services rendered to the city. Neither the Mayor nor any Alderman shall enter into or be interested in any contract with the said city or any department thereof, nor shall either of them vote upon any proposition or with reference to a contract between the City of Newport and any corporation in which either is a stockholder.

Sec. 26. In case of vacancy in the office of Mayor or of any member of the Board of Aldermen the Representative Council may call a special election to fill the vacancy.

Sec. 27 provides that control of the police force be vested in the Mayor, subject to direction of the Council, which shall elect, in January of each year, a Police Commissioner to serve for three years, there being, therefore, three Commissioners, the compensation of whom is fixed by the Council, which shall fill any vacancies which may occur. The powers of this Commission shall be the same as under the old charter.

Sec. 28. Nominations of candidates under this act shall be made by nomination papers filed with the City Clerk at least twelve days before election, and no nomination papers shall be valid in respect to any candidate whose written acceptance is not thereon. Nothing shall be printed or written on any nomination paper except the name and residence of the candidate and the office for which he is nominated, the names and addresses of the nominators, and the acceptance of the candidate. Nominations of candidates for the Representative Council shall be signed by at least thirty electors qualified to vote upon any proposition to impose a tax or for the expenditure of money and residents of the ward from which the candidate is nominated. Nominations of candidates for the Board of Aldermen shall be signed by at least one hundred electors who are qualified to vote upon any proposition to impose a tax or for the expenditure of money and residents of the City of Newport. Nominations of candidates for the School Committee shall be signed by at least one hundred qualified electors of the City of Newport, and nominations for candidates for Mayor shall be signed by at least two hundred and fifty qualified electors of said city. No person shall sign nomination papers for a greater number of candidates than he has a right to vote for at the election for which the nominations are made.

Chapter 1078 of the Public Laws shall not apply to nomination papers provided for by this act.

Sec. 29. On the first Tuesday in December in every year the qualified electors of said city shall give in their votes in their respective wards for a Mayor to serve for one year from the first Monday of the next January and until his successor be elected and qualified, and four members of the School Committee to serve for the term as by law provided; and on the same Tuesday in every year the electors of each ward qualified to vote on any proposition to impose a tax or for the expenditure of money in said city shall give in their votes for five aldermen to be elected by the people at large to serve for the term of one year and until their successors are elected and qualified, and such number of members of the Representative Council to serve for such terms as herein provided. Nothing shall be printed or written upon the ballot except the name of the candidate, his residence, the office for which he is nominated, and such other non-political facts as the election laws of this State may require. In all other respects the election shall be in conformity with the laws of the State now or hereafter in force concerning elections under the secret ballot law.

Sec. 30 provides for division of the city into five wards, "to contain as nearly as may be conveniently an equal number of inhabitants and electors;" with a revision of ward boundaries when necessary, but at intervals of not less than five years.

Sec. 31. Old ordinances remain in force until regularly repealed.

Sec. 32. The act affects no rights, pending legal proceedings or penalties previously incurred.

#### WORK OF CITY DEPARTMENTS

The City of Newport is a fashionable summer resort and its conduct to a considerable extent is regulated by the demands created by its service as such. It has few unimproved streets, but over 90 per cent. of the improved ones are macadamized, a few in the business part of the town being paved with asphalt, bitulithic and granite block. There are comparatively few paved sidewalks, eighty-eight miles being of natural dirt and about seventeen of granolithic, three of flagstone and four of brick and other materials. This would indicate, in many places, a village community; but about forty-two miles of sewers are in use in the city and fifty-seven miles of curbing have been set; probably a larger percentage of the total miles of streets (ninety-one) than could be found in most cities of its size.

The sewerage is on the separate system, there being about four miles of sewers larger than 21-inch, and the remaining thirty-eight miles being of smaller sewers, mostly vitrified pipe. Our attention is called to a recommendation of the Street Commissioner that, on account of the washing of the macadam pavements by rainwater, he thinks it would be advisable to require house-owners to connect their storm water leaders with the sewers, thus delivering to the latter all roof water. As more than twenty-one miles of the sewers are ten inches or less in size, the result of generally adopting this plan would undoubtedly be as disastrous here as it has been in other places.

The Fire Department contains twenty-two men on the permanent force and 119 in the call force; nineteen horses are owned and three extra horses used during the winter months. The Department owned, in the beginning of the year, 12,000 feet of wax treated hose in good condition,

1,000 in fair condition, and 600 condemned. During the year 44,600 feet of hose was wet. The fire apparatus consists of one Amoskeag engine, two Clapp and Jones engines and one Jeffers engine, five four-wheeled hose carriages, three hose wagons, two combination chemical and hose wagons, two hook and ladder trucks, a spare chemical and exercise wagon and a fire alarm wagon.

The Police Department contains, besides the Chief, one Inspector, three Sergeants, a Superintendent of Hacks and thirty-two policemen; also a Police Matron, Janitor of the Station and patrol-wagon driver. The treatment of the troublesome problem of boys who commit minor depredations has been met there by detailing an officer to cover any territory from which has come complaints of such depredations, who remains there until the annoyance ceases. In the majority of cases, the culprits are apprehended and obliged to make restitution in full for all damages, and warned by the Court that a repetition will result in swift punishment.

Besides 277 fire hydrants, the city has fourteen fire reservoirs. Public fountains to the number of thirteen add greatly to the appearance of the city and comfort of the citizens.

#### Safeguarding Public Money

WE believe that comparative investigations have shown that the percentage of funds lost through dishonesty of officials is less in the case of municipal than of all other corporate funds; but nevertheless the following, quoted from the *Daily Financial News*, shows that their recommendations deserve serious consideration.

"Messrs. Beck, McElroy & Bullock, public accountants, of Detroit, Mich., have made up a table of shortages, defalcations and embezzlements in public accounts in the United States which have been brought to light during the past seven months. These figures are compiled from carefully gathered newspaper reports, but do not by any means cover all cases of this character, as many have been covered up and made good without seeing the light of publicity:

City, county and township treasurers.....	\$532,853.06
Tax collecting officers.....	202,655.03
Comptrollers and Auditors.....	98,648.35
City clerks .....	128,882.07
County clerks .....	45,405.43
County officers unclassified.....	100,000.00
Court clerks .....	78,269.00
President Board of Education.....	50,000.00
Supt. Water Works .....	6,418.39
Supt. Lighting Plant.....	1,170.00
Township trustees .....	545.05
Cashier of custom house.....	11,500.00
Police Department employees.....	8,500.00
Recorder .....	158.00
Postmasters .....	2,206.10
	<u>\$1,267,210.48</u>

"If an expert examination of all public accounts throughout the country were made, these figures would unquestionably be increased several times over. Many of the cases making up the above figures were only revealed through audits made by disinterested persons, or else were discovered because of the failure of the defaulter to carefully cover up his peculations.

"In many of the cases making up the figures above

given, the defalcations would have been prevented had the city or county provided an adequate safeguard and a proper system for the handling of public moneys. While it is probably true that honesty cannot be legislated into a person, many an official of good reputation has gone astray through having the custody of large amounts of money, not subject to any daily or regular check.

"The moral of this is that reliable public accountants should be employed to safeguard public funds."

#### Playgrounds in Boston

THE Board of Park Commissioners of Boston, Mass., in their last annual report, state that "playground extension is one of the most important parts of the work of this department." During the year there was added to their list one of 12 1-2 acres in the Fens, made by filling in part of a basin and adjoining salt meadows at little cost. Winter skating, as well as summer games, are here provided for. The greatest demand in certain sections is, they say, for small neighborhood playgrounds of half an acre or less, for children, scattered through the more populous districts.

One 40-acre playground, Franklin Field, is too small for the demands upon it, and it is recommended that an adjacent 34 acres be graded and made use of. This playground is used by the residents of all sections, thousands visiting it every week. It is used by the employees of business firms for Saturday and holiday contests, which are witnessed by large crowds. Baseball, football, tennis, cricket, skating and bowling on the green are the principal sports. In preparing the grounds they were plowed, leveled and covered with about three inches of heavy loam; they were then seeded and at once thrown open to the public. In spite of hard usage during the summer, a good stand of turf remained at the end of the first year.

The next largest playground is Savin Hill Beach, 18.6 acres, where an additional building containing 548 lockers for bathers was erected during the year. Skating is provided here during the winter. Neponset playground, of 18 acres, is used for baseball and skating, and a children's corner is in charge of a female teacher. North Brighton playground, 14 acres, offers accommodations for baseball, quoits and skating. At Billings Field, 11 acres, tennis, baseball, football and skating are provided for.

Other playgrounds are Forest Hills, 9.6 acres; Commonwealth, 8.07 acres; Rogers Park, 6.9 acres; Christopher Gibson, 5.8 acres; Columbus avenue, 5 acres; First street, 4.6 acres; Marcella street, 4.5 acres; Cottage street, 3.85 acres; Roslindale, 3.7 acres; Randolph street, 2.8 acres; Mystic, 2.3 acres; Fellows street, 0.85 acre; and Prince street, 0.4 acre. The total area of all amounts to 196.97 acres. Among the games provided for other than those already mentioned are putting the shot, and basket ball and other indoor games and gymnastic exercises.

There was expended during the year for the maintenance of these playgrounds: \$146.12 for roads; \$618.30 for walks; \$22,150.24 for grounds; \$10,495.36 for buildings; \$232.45 for drainage; \$1,092.76 for sheep and water fowl; \$4,229.29 for skating and other sports; and \$1,841.02 for women's and children's gymnasiums.

# MUNICIPAL JOURNAL AND ENGINEER

A. PRESCOTT FOLWELL, EDITOR

Published every Wednesday

By Swetland Publishing Company  
Flatiron Building, Madison Square  
New York City

H. M. Swetland, Pres. J. T. Morris, Treas. F. P. Durt, Secy.  
G. E. Sly, Advertising Manager  
M. C. Robbins, Western Manager, 836 Monadnock Block, Chicago, Ill.

Telephone, 6723 Gramercy, New York

## SUBSCRIPTION RATES

United States and possessions, Mexico, Cuba . . . \$3.00 per year  
All other countries . . . . . 4.00 per year

Entered as second-class matter, January 3, 1906, at the Post Office  
at New York, N. Y., under the Act of Congress of March 3 1879.

## CHANGE OF ADDRESS

To insure the accuracy of our mailing lists, subscribers are requested to notify us of any change of address, giving both the old and new address.

It is further requested that our Subscription Department be notified if copies are not received promptly.

Readers are invited to contribute to the MUNICIPAL JOURNAL AND ENGINEER, either in the form of special articles or of letters discussing matters of current interest.

It is also desired that the facilities furnished by the reference library in this office should be widely known and freely used by those interested in municipal affairs. Visitors will be welcomed and provided with conveniences for search, and inquiries by mail will be promptly dealt with.

JANUARY 8, 1908

## CONTENTS

Newport and the Newport Plan (Illustrated).....	43
Safeguarding Public Money.....	48
Playgrounds in Boston.....	48
Perverse Pittsburgers .....	49
Education in Sanitation.....	49
The Ashokan Dam Contract.....	50
News of the Municipalities.....	52
Legal News—A Summary and Notes of Recent Decisions.....	58
Municipal Appliances (Illustrated).....	60
News of the Societies.....	61
The Week's Contract News.....	62
Incorporations .....	69
Personals .....	69
Trade Notes .....	70

## Perverse Pittsburgers

Is it impossible to enforce the proposed use of "pay-as-you-enter" cars in this country? Or are Pittsburg citizens exceptionally obstinate in this matter? These questions are suggested by the description in another column of the reported failure of the transit company in that city to compel passengers to pay the conductor before entering the car. This type of car has been in use in Montreal for several months with very satisfactory results, and its use

in Chicago passed the critical first week with little trouble reported. It looks, therefore, as though Pittsburgers were perversely refusing to assist the transportation company in solving the problem which confronts it. When numbers of men club together in their efforts to embarrass the company, and deliberately refuse to tender anything smaller than a dollar bill in payment of fare, it looks to an outsider as though the city authorities should interfere in behalf of the non-conspirators, through the police power if necessary. Few passengers on ordinary cars are not provided with either nickels or dimes, and we believe that the company would be justified in making the regulation, and the city in assisting in its enforcement, that no one would be permitted to ride who tendered any piece of money larger than a dime for one fare. We suggest as a favorable alternative that car tickets be made legal change for larger sums, which should be redeemable at the office of the company. This would also serve to make more general the use of tickets, which would greatly expedite collection of fares.

Incidentally we second the suggestion of a contemporary that these be called prepayment cars, rather than the customary awkward quadripartite name.

## Education in Sanitation

PROBABLY at no time in the history of the world has public health received so much intelligent attention as during the past year or two, and the indications are that the efforts of sanitarians in this direction will, during the next few years, by increasing, receive more general and substantial support from the people at large and from their representatives in city, State and national governments. Efforts towards the formation of a National Committee of Health as a part of one of the departments at Washington is beginning to take form, and it is estimated that properly directed efforts of such a commission, adequately backed by legal powers, may, within a few years, reduce the death rate of the country by 50 per cent. In the last convention of the National Municipal League resolutions were passed providing "that a committee of seven be appointed by the chairman to consider and report as to the best methods of promoting co-operation between the national, State and local governments in regard to matters affecting municipal sanitation, and that the said committee be authorized to consider the subject in conjunction with a similar committee of the Civic Association, if such should be appointed."

Already, through the action of the smaller units of city, county and State, acting through boards of health and commissions of various kinds, the death rate of the country has, during the last one hundred years, been reduced to a degree which would, a century ago, have been believed to have been impossible. Much of this has been due to the medical fraternity and scientists, who have discovered the causes of a number of preventable diseases, such as smallpox, typhoid fever, and, more recently, consumption, and rendered possible the prevention of these,

where before the sole reliance was placed upon curing them. Every one is familiar with the remarkable results following upon the proof that mosquitoes were almost the sole carriers of yellow fever germs and of malaria, and that typhoid was invariably contracted by taking into the stomach certain germs emanating from those sick with the same disease.

The most recent illustration of stamping out of a disease by somewhat similar methods is offered by San Francisco, which, in an effort to wipe out the bubonic plague, has, during the last four months, destroyed approximately 130,000 rats, which animal was believed to be a carrier of this disease from place to place. Of this number 11,391 rats were examined by bacteriologists and 106 were found to be infected by the plague. It might seem almost like labor lost to carry on such extensive operations against the rodents when only 1 per cent. of them were found to be dangerous. But this is on a par with the purification of water, since, of the bacteria removed by filtration, the percentage of dangerous ones is probably even smaller than this.

From time to time the list of contagious or infectious diseases is added to and it does not seem inconceivable that ultimately practically all of the ills of mankind may be placed in the preventable class and finally become as rare as is cholera or the bubonic plague in this country, and deaths from causes other than accidents and old age be reduced to a minimum.

There is no question that to accomplish this will require large expenditures. It costs to filter sewage and water, to conduct dairies so that all milk will be absolutely free from disease germs of any kind, to drain swamps and in other ways destroy mosquito pests, to catch and kill plague-bearing rats, to maintain hospitals for contagious diseases, to maintain quarantine at the various ports of entry and to exert in other ways the governmental control which is necessary to compel sanitary precautions by the ignorant and careless and protect the healthy against the diseased. If the total cost of all this were set forth fully it is possible that many citizens would protest against it as being a waste of money and not producing adequate returns. But from a humanitarian and also from a financial point of view, we think the better informed and more patriotic citizens will cheerfully acquiesce in all such expenditures when economically administered.

But until a large majority of our citizens are educated to an appreciation of the benefits of sanitation, the efforts of the authorities in this direction will be greatly impeded and can produce but imperfect results. Education in sanitation is therefore even more necessary at the present time than direct preventive procedures, and we believe that the most important part of public school curriculums should be the study of sanitation, until every citizen realizes that carelessness with filth is as dangerous as carelessness with dynamite. With such education made general and fostering among people at large a realization of the importance of sanitation, the cost of preventive sanitation will be greatly lessened.

## THE ASHOKAN DAM CONTRACT

### Arguments of Merchants' Association Upholding Action of Board of Water Supply in Awarding It to Other Than the Lowest Bidder.

BECAUSE of claims made by certain citizens that the New York Board of Water Supply was not justified in awarding to other than the lowest bidder the contract for the Ashokan dam, Mayor McClellan caused an official inquiry to be made into the circumstances, in which three engineers testified that they believed this claim to be well founded; the low bidder also testified that he believed his bid would have yielded a profit of 10 per cent. Following this inquiry it was rumored that charges would be made against the Board looking to the removal of its present members. No charge, we believe, was made that the award was due to bribery or anything other than bad judgment.

On December 30 the Committee on Water Supply of the Merchants' Association addressed a letter to the Mayor, which sets forth so fully the argument in favor not only of this particular action of the Board, but of awarding contracts to other than lowest bidders, that we think it worth while to present a fairly complete abstract of it.

HON. GEORGE B. MCCLELLAN, Mayor.  
City Hall, City.

*Dear Sir:* The Committee on Water Supply of The Merchants' Association of New York has caused to be made a careful study of the circumstances under which the contract for the Ashokan Dam was awarded by the Board of Water Supply, and of the testimony taken in the official investigation by the Commissioners of Accounts, and earnestly urges your consideration of the following statement. It believes that, in exercising the discretionary responsibility imposed upon it by the law, as it did, the Board of Water Supply exhibited one of the highest instances of civic courage and virtue in the recent history of the City.

In August last the Board of Water Supply received five bids for the construction of the Ashokan Reservoir, as follows:

	Amounts	Ratios
O'Rourke Engineering & Construction Co.....	\$14,707,750	100
Stewart, Kerbaugh, Shanley Company.....	13,979,813	95
Bradley Contracting Co.....	13,931,250	95
McArthur Bros. Co. and Winston & Co.....	12,669,775	86
John Peirce Company.....		

Sec. 29 of Chapter 724 of the Laws of 1905 provides that the Board of Water Supply

"may accept the bid or proposal, the acceptance of which will, in their judgment, best secure the efficient performance of the work, and they may reject any or all of said bids."

It is clear, therefore, that the law contemplated possible circumstances under which the acceptance of the lowest bid is not for the public interest, and intends not only that the Board may, but *shall* exercise its judgment, and shall decline the lowest bid if it reasonably appears that efficient performance or best ultimate result will not be secured under such lowest bid.

In this case the serious discrepancy of \$2,354,250, or nearly 20 per cent., between the lowest and next lowest bid and the estimates of cost made by the engineers of the Board (which averaged \$12,780,000) raised the question whether efficient performance could be secured under the lowest bid.

Inquiry was thereupon made by the Board of Water Supply as to the relative experience of the several bidders, and the ability of the lowest bidder to carry out the undertaking in the manner and within the time prescribed. It was developed:

1. That all of the four high bidders had had ample experience in the construction of work of the kind involved, and had made careful and protracted studies of the site as well as of the specifications.

2. That the lowest bidder was without experience in hydraulic construction, had little experience in excavation and embankment work (in which item his bid was 70 per cent. lower than that of the next higher bidder), was expert only in masonry construction, and had not made any adequate examination of the site. Mr. John Peirce, President of the Company making the lowest bid, admitted that its bid for excavation was not based upon personal experience or knowledge, but upon advice from outside sources. He further admitted that he had consulted with three steam-shovel men of large experience in excavation, had not been able to get from them figures that would protect him in his bid, and that in his judgment the figures on excavation and embankment were too low to do satisfactory work for himself or the City.

Before advertising for bids the Board had caused to be made separate estimates by four of its own engineers, each working wholly independently of the other, and based upon data gathered by many months' personal study of the site and conditions. These independent estimates ranged from \$12,506,225 to \$13,019,575, averaging \$12,762,000.

Thus on the one hand the Board had four estimates from experienced contractors and four estimates from its own engineers, five of which estimates concurred in placing the value of the work between \$12,500,000 and about \$13,000,000, and three of which placed it at still higher figures. On the other hand the Board had one estimate of about \$10,300,000 from a contractor who admitted his inexperience, his ignorance of the physical conditions, his inability to get excavation done at the prices bid by him, and expressed his willingness to be relieved of the contract.

A heavy preponderance of expert opinion, therefore, warranted the belief that the lowest bid was below the cost of the work. On the issues thus presented, and realizing the importance of the questions which they involved, and the seriousness of the responsibility devolving on the Board, the Board called for the opinion of its consulting engineers, Messrs. John R. Freeman, Frederick P. Stearns and William H. Burr, each of whom in a written opinion, without reservation or qualification, concurred in the opinion that the lowest bid would not cover the probable cost of the work, that it would involve loss to the contractor, that such loss would occasion serious delays, litigation, claims for extra allowances and other elements of additional cost, and that the best interests of the city would be served by rejecting the lowest bid and by accepting that of the next higher bidder.

In addition to this large body of expert opinion adverse to the acceptance of the lowest bid and favoring the acceptance of the next higher bid, the Board gave consideration to the following pertinent facts:

1. That the prompt completion of the new Catskill Water Works is imperatively necessary for the protection of the city against a water famine.

2. That the time limit fixed by the specifications contemplated the earliest possible completion of the work, and that completion within the prescribed time would require the work to be prosecuted with the utmost diligence and without avoidable delays.

3. That hitherto, in the case of contracts undertaken at a loss to the contractor, the completion of the work has been excessively delayed, in many cases years beyond the contract period; that in such cases the interest charges for the period of delay frequently exceed the difference between the lowest and the next higher bid; and that in case such contracts be declared forfeited because of delay, and re-let, the ultimate cost to the City exceeds the higher original bids.

In the case of the Muscote dam, a small contract, the work was delayed three years and seven months, involving an interest loss of nearly 14 per cent. on the land value and about one-half

the construction; the contract was forfeited, and re-let at an advanced price, so that the city was ultimately a considerable loser by originally letting the work at too low a price.

In the case of the Jerome Park reservoir there were several years' delay, and a heavy loss in interest charges, directly due to the fact that the contract was profitless.

It can be shown that in the great majority of losing public contracts, in this and other cities, the ultimate result is great delay, loss in interest charges, and increased cost in case of forfeiture and re-letting.

Because of these considerations, and believing, in the light of experience of other losing contracts, that the Peirce bid would not secure efficient performance of the work, but on the contrary would entail delay and ultimate loss to the city, the Board of Water Supply exercised the discretion explicitly conferred by law, refused to accept the Peirce bid of \$10,315,350, and accepted instead the bid of McArthur Brothers Co. and Winston & Co., of \$12,669,775.

The advice of four of their staff engineers and three consulting engineers prominent in their profession warranted the belief by the Board that the lowest bid was less than it would cost the contractor to perform the work and that its acceptance would be prejudicial to the best interests of the city. It was admitted by the lowest bidder that he was without experience in that portion of the work upon which his bid was 70 per cent. below the next higher; that he had been unable to "make good" on that part of his estimate; and that he would be glad to be relieved of the contract. Experience has shown that losing contracts involve delay and ultimate increase of cost.

Your Honor will recall that a similar discretion is lodged in the Aqueduct Commission, and that it was exercised by that Commission in the case of the Cross River dam when the contract was let not to the lowest bidder, but to the next to the highest bidder, there being seven bids in all. The Comptroller very clearly stated the reasons which, in his opinion, justified the action of the Commission. He said:

"It seems to me that we have no choice except to come to the conclusion that upon the evidence here the acceptance of this bid will best secure the efficient performance of the work, not because of any defect in business or practical ability or financial ability on the part of other bidders, but upon the broad proposition laid down by the engineers that the bidders who have built dams are best able to build other dams, and build them quickly, and time is the very essence of this whole work. Upon that view of the matter I vote in favor of the resolution."

In the opinion of this committee the Board of Water Supply exercised its discretion in a proper and reasonable manner, having in view the prompt and efficient performance of the work and the probable ultimate economy to the city by the acceptance of the higher bid. (Here followed resolutions upholding the action of the Board.)

It appears clearly from the evidence taken in the inquiry that the lowest bid—that submitted by the Peirce Company—was made up in a casual and insufficient manner; that the figures were prepared by a single engineer after a brief examination of the ground; that the engineer had little personal knowledge of the cost of excavation; and that no competent revision of his figures was made. On the other hand, it is shown that the accepted bid was prepared, after exhaustive study, upon the independent estimates of six members or engineering employees of the firm of McArthur Bros. and Winston Co.

This committee, therefore, respectfully prays that you will decline to entertain further proceedings against the Board of Water Supply, on the ground that the evidence does not warrant further action, and that it would be prejudicial to the best interests of the city.

Very respectfully yours,

(Signed.)

HENRY R. TOWNE,

*Chairman of the Committee on Water Supply, the Merchants' Association of New York.*

December 30, 1907.

## NEWS OF THE MUNICIPALITIES

**Divers Subjects of General Interest and Their Treatment by City Councils and Officials—Streets, Water Works, Lighting and Sanitary Matters—Police and Fire Items—Government and Finance**

### Roads and Pavements

DAVENPORT, IA.—During the past year 7.28 miles of paving were laid at a total cost of \$338,692. The figures for the previous year were: 2.49 miles, costing \$128,623.

FORT WORTH, TEX.—City Attorney Sidney Samuels, in preparing a revised contract between the city and the Texas Bitulithic Company, has incorporated a provision which is entirely new in paving contracts in Fort Worth. It is agreed that the company, after beginning work on a street, lay paving at the rate of 500 square yards a day or 15,000 yards a month. This is to prevent unnecessary blocking of streets after the work has begun.

HARTFORD, CONN.—City Engineer Ford is being congratulated on the speed with which the job of renewing the floor system of the Mulberry street bridge was planned and executed. The plans for the work were approved on a Thursday evening. On the following Saturday evening and girders were laid down on the site of the proposed work ready for action. Monday morning the work began and after five days of actual labor was completed. Much credit is due Superintendent of Parks George A. Parker, Paul Sheldon, Bridge Engineer of the City Engineering Department, and to Erecting Foreman Stearns, of the Berlin Bridge Company. Council appropriated \$1,000 for the work; the Berlin Company's price was \$800; incidentals were \$150, leaving \$50 to return to the City Treasurer.

NEWARK, N. J.—A new rule adopted some time ago by the Board of Works for the purpose of protecting new pavements is leading to serious complications. The rule was to the effect that no pavement can be torn up within five years of the time it has been laid. It is customary, before the street is paved, to issue notices to public service corporations to make such connections as they desire. The Gas Department of the Public Service Corporation, which is specially affected, will not concede that the city possesses the authority to compel it to lay laterals to the curb line of unimproved property. As these laterals cost \$3 each, the making of these connections by the wholesale, without knowing that gas from them would ever be contracted for, would tie up more money than the company could afford. It is doubtful, too, if the city could lay the laterals, as they would have no right to tap the mains. As matters stand now, many owners of new structures are unable to secure gas. The Commissioners of the Board are inclined to believe that the law vests discretionary power in them, and that they will have to exercise it and grant permits contrary to the rule.

PHILADELPHIA, PA.—Figures of the cost of paving repairs in and along street railway tracks as done by the railroad companies themselves and by the city under an agreement made over six months ago by which the city accepted a lump sum of \$500,000 and agreed to do the work itself, have been made the subject of a special report. For this work the Rapid Transit Company spent in 1903, \$404,924; in 1904, \$375,237; in 1905, \$471,993; in 1906, \$469,845, an average of \$430,500. In addition to this, the company paid license fees of \$120,000 yearly, and \$15,000 for the removal of snow. In the last six months the city has spent money for repairs at the rate

of \$296,070 a year. Besides additional inspectors have been employed at a yearly cost of \$65,000. Opinions differ as to whether the city gained or lost by the agreement.

PORTLAND, ME.—In his report to Mayor Adam P. Leighton, Commissioner of Public Works Bradbury states that during the year 26,724 square yards of permanent street pavement have been laid on various streets. This total includes 8,235 square yards of granite block, 12,230 square yards of bitulithic pavement, 249 square yards of brick, and 5,001 square yards of Hassam. Five thousand and eighty-four square yards of granite block pavement have been relaid. In addition to the above 22,351 square yards of new macadam have been laid and 18,044 yards of macadam resurfacing, making a total, including permanent work, of 72,203 square yards.

SCRANTON, PA.—No less than 113 warrants for residents who have violated the city ordinance regarding the cleaning of sidewalks have been issued by Director of Public Works C. R. Acker. In spite of the variety of excuses offered at the hearing in the Police Court, all offenders were treated alike—\$5 fine and \$2.50 costs. Many prominent citizens from all sections of the city are included in the list of violators.

YORK, PA.—The question of ownership and control of sidewalks was brought up by a report that the York Railways Company had arranged with the owners of property at a street corner to cut away a portion of their sidewalk in order to give the cars space enough to swing free of the pavement in making the turn. The railway officials stated that they had agreed to pay the property owners for the portion of their sidewalk which they would remove. The committee took the ground that the property owners have no right to sell any portion of the sidewalk and voted that the York Railways Company must alter their curve in order to get necessary clearance.

### Sewerage and Sanitation

ALBANY, N. Y.—Governor Hughes has promised his assistance to State Health Commissioner Porter to secure from the Legislature an appropriation of \$50,000 to fight tuberculosis in the State. Commissioner Porter has communicated with a number of prominent physicians of the State who have accepted an invitation to become members of a commission.

DALLAS, TEX.—Greatly improved sanitary conditions were reported at a meeting of the Board of Health, and there is little of contagious or infectious disease in the city. In the matter of the deposition of trash in alleys, improvement is still to be desired, although this nuisance is being abated. Mayor Hay has suggested that the floors of all meat shops should be of concrete. Several dealers have prepared to improve their places in this manner. It is stated the police are co-operating with the health authorities better than ever before. One important improvement being considered is the construction of a sewage disposal plant.

DAVENPORT, IA.—According to a report of William Claussen, Clerk of the Board of Public Works, during the past year 4.64 miles of sewers were laid in the city at a total cost of \$35,093. This was only one-quarter of

the amount done the previous year, the difference being due to a trunk sewer 3.37 miles long which cost \$71,009.

DAYTON, O.—In asking larger appropriations for the Board of Health, Dr. McCann made to the City Council some startling allegations relating to the character of the city's milk supply. He declared that about three hundred dairies supplied Dayton; he had visited forty and saw but two whose milk he would allow any of his patients to use. Speaking of the effect of poor milk in spreading tuberculosis, the speaker stated he knew of one family in Dayton which was wiped out with the disease and they all partook of milk from the same cow.

HARTFORD, CONN.—A resolution will be introduced in the Council providing for the establishment of two public shower baths, one on the East Side and one in the factory district, at a cost of \$9,500. This action is in compliance with the suggestions of a committee made up of members of the Commission on City Plans, the Municipal Art Society and the Board of School Visitors, whose investigations established some remarkable facts. It was found that out of a total of 20,034 dwelling apartments in the city 7,511 are without bathing facilities. These figures indicate that about 40,000 people are in need of bathing facilities in their homes. Principal Arthur D. Call of the Second North School asked 549 children whether their homes had bathing facilities and 224 answered in the negative.

INDIANAPOLIS, IND.—The Eighth Grade school children have been sending petitions to Superintendent Kendall, asking for the appointment of a committee of representative citizens to assist in the movement for the enforcement of the ordinance against spitting in the street cars. The children suggested that such a committee might co-operate with the traction company and the Board of Health, both of which have expressed a desire to see the enforcement of the ordinance. The children are taking the numbers of the street car officers who do not enforce the regulations.

LANCASTER, PA.—After a thorough investigation, State Health Commissioner Dixon has notified the city authorities that the entire sewerage system of Lancaster will have to be reconstructed. A sewer has recently been built whose outlet was in the Conestoga creek, a short distance below the intake of the water works pumping station. A dam will have to be built at this point and if it is not finished in a year the city will become liable for a heavy penalty. The recommendations also call for a sanitary sewer system for a portion of the town. This will make necessary the building of a disposal plant.

MINNEAPOLIS, MINN.—An ordinance has been passed regulating the sanitary conditions of hotels and restaurants, bakeries and confectionery establishments. It is provided that every such establishment be kept free from effluvia arising from any sewer drain or privy. That wherever labor performed requires a change of clothing separate dressing rooms shall be provided for the sexes. Every room used for the manufacture, storage or sale of food products shall be light, dry and airy; its walls and floors shall be so constructed as to exclude rats and other vermin; shall be at all times free from moisture and kept in good repair. Floors shall have a smooth surface and if four feet below the ground shall not be of wood.

SENECA FALLS, N. Y.—By a vote of 223 to 185 the taxpayers of the village of Seneca Falls decided to go on with the construction of the sewer system, which is partially completed, by the appropriation of \$49,500. The vote was close in all districts and women voted on the question as well as men. Regarding the result, Clarence A. Macdonald of the Municipal Board states that the sum of \$25,000 was saved by the vote as compared with

what would have been the result had the election been postponed until the charter election in the spring, when the present contractor would have been released from his contract.

TRENTON, N. J.—Dr. Elmer Barwis, a member of the Trenton Board of Health, and also of Mayor Gnichtel's Typhoid Fever Committee, declares that the only way to successfully combat the epidemic is to obtain united action by New Jersey, New York and Pennsylvania to prevent the pollution of the Delaware river, from which Trenton draws its water supply and then to establish an adequate filtration system here to further purify the water used for domestic purposes. He also advocates the building here of a sewage disposal plant for the protection of Burlington and other towns down the river, where typhoid is now raging, presumably because the stream is contaminated by infected matter from Trenton. The Typhoid Committee is now preparing a preliminary report to submit to the Common Council, when a request will be made for funds to carry on a further investigation of the typhoid epidemic and its relation to the city's water supply and sewer system.

### Water Works

BALTIMORE, MD.—Baltimore's \$5,000,000 water enterprise seems now assured if the voters approve the necessary bond issue. Opposition from Baltimore county has hitherto prevented the passage by the Legislature of the loan act. The county has claimed the prior right to take 10,000,000 gallons daily from the reservoirs which it is proposed to build. At a recent conference of city and county officials this claim was abandoned. The city needs 170,000,000 gallons daily and, on this basis, it is believed that there will be a surplus of 60,000,000 gallons daily. Of this surplus the county is given the right to the 10,000,000 gallons it wants. The plan is for a 75-foot dam at Lock Raven which will form a lake seven miles long.

COUNCIL BLUFFS, IA.—The proposed new water works and extensions of the present water works company will amount to about \$500,000. Seven miles of new mains will be added bringing the total up to 50. The plans of City Engineer Etnyre call for a pumping and settling plant on the bank of the river at North Twenty-ninth street and a reservoir in Fairmont Park. Later a high pressure system will be added with a standpipe in the highest portion of the park. At the station a centrifugal pump will take the water from the river to the settling basins. From there it will return to the station where high pressure pumps will force it to the distributing reservoir and, in case of fire, furnish extra pressure.

JACKSON, MISS.—State Revenue Agent Adams has filed suit against the Light, Heat & Water Company of Jackson, which sold out to the city and passed the deeds to the Mayor, for back taxes for twenty-five years. The company has been assessed all these years at \$30,000 and sells out for \$216,000. The Revenue Agent wants the tax on the difference for the State, county and town, and which will amount to many thousand dollars.

MONTGOMERY, ALA.—A good investment was made by the city when it purchased a number of years ago the water works from a private company, according to the report of Superintendent McD. Cain. The plant was purchased and improved from the sale of \$800,000 bonds. The total cost of the plant to date has been \$868,961 and the net receipts or profits \$107,968. The net receipts for the last year were \$10,017. The supply comes from 17 wells which have a combined capacity of 5,000,000 gallons daily. Basing an estimate on past increase of consumption the Superintendent says the number of wells will have to be increased in the next few years.

SEBRING, O.—The City Water Company has been notified by order of the City Council that no further bills for fire protection would be paid until the company placed its plant in such condition to render to the city the fire protection as provided for in the franchise of the water company. This action was due to a failure of the water supply at a fire when the Sebring Pottery Company came to the rescue with their private reservoir, tank and pressure pumps. If it had not been for this help, there is reason to believe that the entire business section and part of the residence section would have been destroyed.

UTICA, N. Y.—Shall the Consolidated Water Company spend \$300,000 for a filtration plant or shall the citizens of Utica take chances on a typhoid epidemic, is the question asked in the conclusion of a report of the committee of the Board of Health which conferred with the State authorities regarding the water shed from which Utica gets its supply. While the report was generally approved by members of the Department, Commissioner Johnson stated that he believed that a filtration plant was more expensive and less efficient than control and inspection under the city authorities. The report quotes figures from the report of the Bureau of Water of Albany showing the efficiency of the filters in removing bacteria and the decrease of typhoid since the plant has been in operation—results which are stated to be generally typical of results derived from filtration.

ZANESVILLE, O.—Leaks in water mains under the Licking and Muskingum rivers have been giving trouble. The pipes gradually settle and the riveted seams open. The work of repair goes on with difficulty because, in winter, the work is so injurious to the health of the divers that a few days' work under the river usually incapacitates them for work for several weeks. The gas companies, too, are having trouble with their pipes.

#### Street Lighting and Electric Power

CLEVELAND, O.—Mayor Johnson is preparing for a warfare on the Cleveland Electric Illuminating Company. In unmistakable terms he announced that the city proposed to deal with that concern in the same manner that it has with the Cleveland Electric Railway Company, and that if no other means can be found a big competing company will be launched. The officials of the Illuminating Company have expected such action for several months and as a result all work on the \$3,000,000 proposed plant on the lake front has been held up until it is found just what the city means to do in regard to the matter. The Mayor declared that he expected to take the matter of a competing plant up with the General Electric Company and asked Vice-President Samuel Scovill if his company would notify the city as to the question of selling out to the city.

COLORADO SPRINGS, COL.—A reduction of 10 per cent. in the rates of the Colorado Springs Electric Company took effect on January 1. This is a result of the campaign which ended in the property owners voting power to the City Council to issue bonds for the construction of a municipal lighting plant. The City Council recently adopted a report from its special lighting committee asking the company to grant a reduction at once and a further reduction of 10 per cent. in five years. The rate of 12½ per cent. per k. w. hour will be reduced to 11 cents, with a discount of 1 cent if bills are paid promptly. The minimum guarantee per month will be reduced from \$1.50 to \$1.25.

HARRISBURG, PA.—The consolidation of the Paxtang Electric Company and the Harrisburg Light, Heat & Power Company is opposed by Mayor Gross unless under an agreement to pay the city a fair compensation for the privilege. The Mayor wants to have a maximum

price arrived at by arbitration fixed for city lights and an agreement by which the city shall receive a percentage of the gross earnings. The consolidation ordinance should also provide that the rate agreement should be subject to revision at stated intervals. Poles should be removed and wires placed in conduits owned or controlled by the city so that a competing company could not be deprived of their use.

MILWAUKEE, WIS.—The Board of Public Works has served notice upon other municipal departments and various public service corporations requiring them to get ready with the underground wires and conduits for the elevation of the railroad tracks on the South Side. Those served are the street railway company, the gas company, the telephone company, both telegraph companies, the Chicago & Milwaukee Electric Railway Company and the Police and Fire Departments. They must clear the way with their poles and all obstructions.

PITTSBURG, PA.—Mayor George W. Guthrie says there is no question of abandoning the Allegheny municipal lighting plant. On the contrary, it is thought that plans will be made for adding to the works and that many of the down town streets of Pittsburgh may be lighted with it.

PUYALLUP, WASH.—The report on the municipal lighting problem, made by Fuller and Manley, of Tacoma, was read at a mass-meeting of citizens. The report favored a 5,000-horsepower hydraulic plant, which, it was estimated, would cost \$75,000. With a comparatively small additional cost, 5,000 additional horsepower could be developed. Council voted in favor of securing an option on a suitable site at once.

RICHMOND, IND.—There will be no sale of the Richmond municipal lighting and power plant to the syndicate that owns the private company, the Light, Heat & Power Company, the City Council having so decided by a unanimous vote. Some time ago the private company presented a proposition to purchase, offering to return the city the full amount of its investment, take such franchise as the city saw fit to grant and pay the cost of the appraisal.

ST. CATHARINES, ONT.—The City Council has concluded consideration of the by-law granting a 25-year franchise to the Falls Power Company. The company contracts to light the city for five years at \$39.50 per arc light, and make a suitable deposit to ensure the commencement of the contract by July 1, next. The company also agrees to pay the outstanding accounts of the Stark Company and to supply a current for 250 incandescent lights for the public and charitable buildings of the city free of charge during the term of the franchise. They also consented to a clause forbidding any meter tax.

SAN FRANCISCO, CAL.—The Merchants' Association has recommended the passage of an ordinance requiring the removal of all existing poles and overhead wires except trolley wires within the present underground district before January 1, 1910, and also that after that date one mile of streets be cleared of wires for the next ten years; after that two additional miles are to be cleared. In July of each year, the streets to be cleared in the following year are to be designated.

WESTFIELD, MASS.—Work has begun on the construction of the gas holder of the municipal lighting plant for which the expenditure of \$25,000 was authorized at the town meeting last April. The holder will be 100 feet in diameter and 60 feet high with a capacity of 50,000 cubic feet. Arrangements are made so that a lift may be added at the top, thus doubling the capacity. It is expected that enough gas will be stored so as to tide over any period during which the producing machinery may be out of commission.

### Fire and Police

ATLANTA, GA.—The report of Councilman Charles M. Roberts, chairman of the police committee of Council, commends the efficient services rendered by the department during the current year and special reference is made to the excellent order preserved during the Christmas holidays. The inauguration of civil service is also warmly commended and it is stated that the efficiency of the department has been greatly increased thereby. For the coming year the sum of \$246,180 will be asked as compared with \$216,480 appropriated during the present year. The additional amount is to be used in paying the salaries of twenty-five additional patrolmen and eight reserve men.

CHICAGO, ILL.—Not a single business house fire in Chicago in 1907 extended beyond the walls of the structure in which it started. This tribute to the promptness and efficiency of the department of which he is head was made by Fire Chief James Horan.

LOUISVILLE, KY.—The Board of Public Safety has received and will distribute new fire badges. There are 100 of them and they will be given to newspaper and insurance men. The badges are numbered, and each person who secures one must first register his name in a book, recording the number of his badge. The badges are oblong, made of German silver and bear on their face in black enamel letters the words, "Admit to Fire Line, Louisville Board of Public Safety."

NEW YORK, N. Y.—Fire Commissioner Francis J. Lantry has announced to representatives of some twenty companies engaged in the business of installing private alarms in office buildings and private residences that, in accordance with authority given him by the City Charter, he proposes to put a tax on the companies. The Commissioner thinks the tax is due the city because the private alarm concerns utilize the city wires to a large extent outside the buildings. At a hearing one of the representatives stated that the alarm companies had to pay a city tax on capitalization, a franchise tax and a State incorporation tax, and he thought that was quite enough. It was also alleged that the action, by raising prices for service, would decrease the number of boxes and so act against the Fire Department interests. A date has been appointed for another hearing.

ROCHESTER, N. Y.—Members of the Police Department are apprehensive lest they will have to go through their annual evolutions in some place other than the Armory. The board of officers of the military organizations quartered in the building have recently voted to bar all outside organizations from the Armory. The argument is that as the military officers have put thousands of dollars into the furnishings of their quarters they should not be expected to throw their rooms open for any other purpose than for the military bodies. Moreover, the military code and orders forbid the use of the building for purposes of entertainment where an admission fee is charged. This would apply to the police balls.

WASHINGTON, D. C.—District Commissioners Macfarland and West and Maor Richard Sylvester, Superintendent of Police, visited the Fourth Precinct Police Station to present to Captain James Mulhall and the members of his command the flag they won for efficiency at the recent annual inspection. The men were drawn up in line before the station and Captain Schneider of the Georgetown Precinct, who held the flag, a gift of former Commissioner Wight, last year. Major Sylvester paid a glowing tribute to the winners of the trophy, saying that he realized that the old building they occupied was a handicap to them in their effort to capture the flag. Commissioner West spoke of the high standards required by

the physical and mental examination required for admission to the force and stated that every officer who strives to maintain the high standards of the force will find the authorities ready to uphold him and he will not only find his position secure but his merits recognized. Captain Mulhall responded to the remarks.

While a great number of alarms were sounded during 1907, the damage by fire was not as much as during the preceding year. It is said that the prompt and effective work of the firemen prevented many serious conflagrations. The losses of the year were reduced, Chief William T. Belt thinks, partly because the inspection of all business houses, hotels, theaters, public halls and private houses was vigorously pushed. He adds that it has heretofore been the main effort of Fire Departments to extinguish fires, but those days are numbered with the past, and the present aim is to prevent fires, to the end that the Fire Marshal and his force may reduce fire liabilities to a minimum. The total number of alarms, including bell and local alarms, received by the Fire Department during the year, which closed December 31, was 877. There were also received 58 false alarms. The estimated loss by fire was \$1,110,306, covered by an insurance of \$2,627,765. During the year there were 73 casualties to citizens and 18 firemen were injured in the discharge of their duties.

### Government and Finance

CHICAGO, ILL.—According to Comptroller Wilson, the city must have more revenues and an effort will be made to have the Legislature pass the revenue section of the charter which was defeated at the fall election. The main feature of the financial section was that bonds might be issued up to 5 per cent. of the full value of taxable property instead of the assessed value as at present.

FLORENCE, ALA.—The City Council, with only one dissenting vote, has put a prohibitory license on pool and billiard tables. The rate fixed is \$1,000 on the first table and \$500 on each succeeding table.

HYATTSVILLE, MD.—At a meeting recently held for the purpose of considering proposed amendments to the town charter, Mayor Joseph R. Owens stated that legislation was needed for the purpose of increasing the town's revenue. At the present time, the tax levy is limited to the rate of 40 cents on \$100. It is proposed to add to this a levy of 20 cents to meet the deficiency of \$2,500 and a special levy of 5 or 10 cents for the Fire Department and for water meters.

LOUISVILLE, KY.—The tax levy fixing the rate at \$1.80 has passed the Board of Aldermen. Regret is expressed by the Finance Committee that the rate could not be reduced and in closing, the committee adds that had the \$500 saloon license become effective, the failure of which they deeply regret, the joint Committee on Finance could have given to each department and fund practically the amounts asked for to operate the same in the most approved method, and, at the same time, could have given to the Board of Public Works for streets and cleaning same an additional \$74,000 over and above what they will now get, and have reduced the tax levy to \$1.75.

MONTREAL, QUEBEC.—The Civic Finance Committee has prepared its budget for 1908 and will spend \$5,086,000. Heads of departments and clerical staffs are voted liberal increases in salaries, and provision is also made for the \$2 per day rate which corporation laborers will receive.

NEW YORK, N. Y.—Comptroller Metz has issued a statement commenting on the city's financial condition. The city has authorized improvements amounting to \$200,000,000, but its borrowing capacity is only \$95,000,000. The Comptroller suggests that the debt limit be in-

creased by eliminating self-sustaining bonds from the calculation. Dock bonds and Manhattan and Bronx subway or rapid transit bonds amounting to \$115,000,000 might be so excluded. The additional \$50,000,000 needed for rapid transit and an equal amount for docks would be put in the same class. A constitutional amendment allowing enlargement of the debt limit will be submitted to the Legislature.

**PITTSBURG, PA.**—Ordinances for the issue of \$4,053,000 bonds have been presented to Council in order to carry out the pledges made during the Greater Pittsburgh campaign. The chief items are for enlarging the filtration plant to supply the North Side and South Side and construct a pumping station to deliver filtered water to the Allegheny reservoir, \$1,600,000; for repaving, resurfacing and remacadamizing streets, \$690,000; for water extensions throughout the North Side and Pittsburgh, \$850,000; for bridges, \$363,000; for park extension, \$500,000.

According to the terms of the consolidation Pittsburgh and Allegheny shall each pay the separate indebtedness contracted previous to the consolidation. Accordingly, a uniform tax levy to pay the cost of the city government after February 1 will be made, and a separate levy will be imposed on the taxpayers of each community to pay the separate debts of each.

**ROCHESTER, N. Y.**—Through the annexation provisions of the new charter by which Rochester becomes a city of the first class a considerable saving in taxes will be effected and the revenues of assessors of towns where the city owns conduit lines, reservoirs, easements and other property will be decreased. Not only has city property been highly assessed but the tax collectors have been in the habit of holding back tax notices until the full time permitted by law has expired. The 1 per cent charge which then becomes payable constitutes the compensation of the collectors. This form of petty extortion will now be at an end.

**ST. PAUL, MINN.**—The total expenses for all city departments during 1908, as provided for in the budget, is \$3,201,740, an increase of \$279,782 over the budget of 1907.

**SALT LAKE CITY, UTAH.**—A recommendation that control of inspection of public improvements in course of construction be taken away from the Board of Public Works and given to the City Engineer has been made by the auditing firm which is perfecting a new system of book-keeping for the city. It is argued that as the Engineer makes all the plans and specifications it should be his duty to see that the plans are followed. In the past some inspectors have been appointed who are ignorant of their duties and faulty work has resulted. It is claimed that if the Engineer is given control of the inspection, competent men from his department who have an exact knowledge of their duties will be chosen and better results obtained at much less cost.

**SIoux CITY, IA.**—Twenty-two hundred voters of Sioux City have petitioned the Mayor to call a special election on February 11, for a vote on the new commission plan of city government. Four progressive cities of Iowa are now in line for the commission plan. Des Moines and Cedar Rapids have adopted it and Davenport and Sioux City are carrying on campaigns for its adoption.

**SUFFOLK, VA.**—The principal provisions of a proposed new charter have been agreed on by a special committee. A Council of nine members to serve without pay is provided for. There will be a Board of Control composed of the Mayor, City Engineer and a third member to be elected by Council but not from among its members. The Board will have charge of contracts, supplies and requisitions

and it will see that corporate franchises are adhered to. The Board cannot spend money except when appropriated by Council.

**WASHINGTON, D. C.**—The Commissioners have forwarded to Senator Gallinger, Chairman of the Senate Committee on District Affairs, the draft of a bill making personal taxes in the arrears a personal charge against persons owing such taxes, and recommended its early enactment. The proposed legislation provides that the Collector of Taxes of the District be authorized to bring suit therefor in the name of the District in any court of competent jurisdiction in the District or to bring suit against a personal tax debtor in any State or Federal court where the debtor may be found. In their letter the Commissioners said: "In the city of Baltimore the authorities are meeting with great success in making seizures for unpaid personal taxes upon judgments, the procedure being to sue delinquents before a Justice of the Peace, seize the property on writ of execution and sell or hold the same in abeyance pending the discovery of the ability of the owner to pay."

**WATKINS, N. Y.**—The Village Trustees have adopted a curfew ordinance. Violations are punishable by a fine of \$25.

#### Refuse Collection and Disposal

**ALTOONA, PA.**—An agitation has been going on for some time for cleaner streets. The area of street paving has recently been doubled and the force and equipment of the Department of Highways has remained the same. An old-fashioned sprinkling wagon is followed by the street sweeper and a man with a hand scraper and broom. Occasionally the streets have been flushed. The latter method is to be used more in the future and new hose will be purchased. The city has also been examining a combined sprinkler and sweeper. This consists of a 400-gallon tank and a cleaning roller consisting of a heavy steel cylinder with 24 rubber squeegees each seven feet long.

**GRAND RAPIDS, MICH.**—Acting on the advice of City Attorney Ferguson, the Board of Health will take steps to prosecute all farmers and other collectors who gather garbage in Grand Rapids in violation of the city ordinances. Two inspectors have been delegated to secure the names of offenders and the cases will be carried to the Supreme Court if necessary.

**NEW ORLEANS, LA.**—Commissioner Smith is making a strenuous effort to enforce the garbage ordinance requiring a separation of garbage, ashes and rubbish and is meeting with success. The Commissioner notes it as a singular fact that among the women who cried loudest for a cleaner city and for the adequate enforcement of the garbage ordinance were two or three who were persistent violators of the ordinance even after having been warned.

**TOPEKA, KAN.**—The garbage ordinance recently passed provides that garbage wagons and vehicles hauling manure and other refuse of like character must stay off Kansas avenue. At the same time the Topeka Desiccating Company was given a contract—not an exclusive one, however—to haul garbage and dispose of carcasses of animals and offal for a period of five years.

#### Parks and City Beauty

**CLEVELAND, O.**—Mayor Tom L. Johnson has decided that people have been paying too much for what they buy in the public parks. He figures that there is sufficient profit in the three-cent sandwich and pie to satisfy any reasonable park merchant. He has, therefore, sent a letter to the Park Commissioners suggesting that hereafter many of the commodities that have sold for five

cents be reduced to three. The Commissioners will ask for new bids for privileges on that basis.

CLIFFS, WASH.—At a recent meeting of the Commercial Club, the matter of tree planting and otherwise beautifying the town was taken up and it was unanimously decided that a day would be selected for planting trees in every block in the town site plot.

COLUMBUS, GA.—The city of Columbus is preparing to mark the scene of the ending of the last battle of the Civil War east of the Mississippi river by placing a large boulder taken from the battlefield on the banks of the Chattahoochee river, where, it is hoped, a national park will be established. A bronze plate on the stone will state that the battle was fought April 16, 1865.

HARRISBURG, PA.—The ordinance empowering the Park Commission to acquire land to complete the parkway has been returned to Councils with an affirmative recommendation by the Street Committee after a conference between the Commission and the Committee. The ordinance is designed to complete a work already begun—to complete the parkway which is to encircle the entire city, including the portion already finished. It is expected that nearly all of the land will be donated.

NEW BUFFALO, MICH.—The village by a favorable vote just taken will bond the village to the amount of \$15,000 for park improvement purposes, intending to make the village a summer resort.

SPRINGFIELD, O.—The news item in our issue of January 1 regarding the construction of a boulevard connecting Snyder Park and Mitchell Boulevard referred to Springfield, O., instead of Springfield Mass., as stated.

#### Rapid Transit

ATLANTA, GA.—Following the refusal of the Georgia Railroad Commission to modify its order concerning free passes in favor of municipal employes, Councilman Wheeler Mangum has drafted a resolution recommending that a contract be made with the street car company by which the city will pay for the transportation of its employes.

MINNEAPOLIS, MINN.—The suit of the city against the street railway company, an abstract of which is given on page 682 of our issue of December 11, involving the right of the city under the company's charter to compel the latter to sell six tickets for a quarter has been docketed in the Supreme Court of the United States.

NEW YORK, N. Y.—The Public Service Commission has decided to begin as soon as possible the building of two new subways. One will be a short line running through Canal street from Broadway to the Manhattan bridge, the other will extend from the Battery to Pelham Bay Park with a branch running under Jerome avenue to Woodlawn Road. The streets to be traversed are, Battery Park, Greenwich street, Trinity Place, Church street, Vesey, Broadway to East Tenth, thence under private property to Fourth avenue, East Twelfth, East Thirteenth, East Fourteenth to Irving Place, Gramercy Park, Lexington avenue to East Thirteenth street, Southern Boulevard, Westchester avenue, Eastern Boulevard to Pelham Bay Park; the westerly branch to begin at Park avenue and East 138th street along Mott avenue to 151st street, thence to Gerard avenue, Jerome avenue, from near Clark Place to Woodlawn Cemetery. The cost of these routes is estimated at \$67,000,000.

PITTSBURG, PA.—Confusion and a blockade of the car lines followed the attempts of the Pittsburgh Railways Company to enforce the pay as you enter rules. Trouble began early and increased throughout the day. Many conductors resigned after a few trips. One man quit

as soon as he reached the dispatcher's office. He stopped at a suburban way station, where 112 persons all tried to board the car at once. The result was a long argument while the conductor made change. Finally the crowd forced an entrance to the car. The car lost forty minutes on that trip. Several hundred young men in the downtown offices have joined the "Dollar Club." A dozen of them enter a car at once and each hands the conductor a dollar. The only thing the conductor can do is to keep the car standing while he makes the change. Women with bundles refuse to pay until they can get into the car, and when they are put off threaten damage suits. Although the company at first announced that it would rigidly enforce the order, the confusion became so great that orders have been issued to discontinue efforts to enforce the order.

#### Miscellaneous

BOSTON, MASS.—A project for a \$15,000,000 suspension bridge across the upper harbor, to unite Boston proper and East Boston, was submitted by City Engineer Jackson to ex-Mayor Fitzgerald before the latter went out of office, January 1. The plans call for a structure 8,400 feet long, exclusive of approaches, to stand at an elevation of 135 feet above high water. The approach would be from Adams Square, it would go out over the harbor at Battery Wharf and cross beside the North Ferry to the East Boston wharves, near Border street, and thence gradually sloping to Central Square. Ample space for traffic is provided for in six tracks, elevated, surface, and freight cars, two wide roadways and foot walk on either side. The grade will be 3 1-2 feet in 100. The purpose of the bridge is to accommodate the freight traffic which centers about Noddle Island docks and as a means of opening up to surface cars a large area north of the city.

JACKSON, MICH.—Mayor Glogow has issued a proclamation intended to clap a "lid" on the city such as has never before been attempted. All saloons must be closed after legal hours and on Sundays, all resorts are to be wiped out of existence in the city, all slot machines removed, cigar stores closed Sunday and as many "Blue Laws" enforced as is practicable.

PEORIA, ILL.—In spite of the opposition from owners which has emanated from nearly every business and hotel block in the city of Peoria, Mayor O'Connor has affixed his signature to the ordinance regulating and licensing elevator operators. No suitable substitute has been offered in place of this ordinance, although an attempt was made by owners of building to draw one up.

PATERSON, N. J.—An order has been issued by Acting Mayor Berdan to the effect that in the future when flags are raised to half-mast on the City Hall in honor of a deceased city official it shall not remain at night, but shall only fly from sunrise to sunset. This is in accordance with the military regulations.

SPOKANE, WASH.—If the plans of Mayor C. Herbert Moore, the Board of Public Works and Professor Burr, Consulting Engineer, are carried out, Spokane will have the largest concrete arch in the world, being 750 feet in length, or 517 feet longer than the Walnut Lane bridge, which measures 233 feet. Professor Burr announces that plans are in preparation for the new bridge crossing the Spokane river, at the foot of the Spokane falls at Monroe street, where is developed 16,000 of the 50,000 horsepower electrical energy available, to erect two arches, each 750 feet in length, and it is expected that before the close of 1910 this city will have in the heart of its business district the climax in the construction of the most extended concrete arches in the world.

## LEGAL NEWS

### A Summary and Notes of Recent Decisions—Rulings of Municipal Interest

#### UNLAWFUL EXPENDITURE

**Sitz vs. Village of West Hammond.**—Under the express terms of Hurd's Revised Statutes, 1905, the corporate expenditures for appropriations of a village in any one year may not lawfully exceed the amount provided for in the annual appropriation bill of that year, and no contract may be made or expense incurred, unless the object of the contract or expenditure shall have been included in the general appropriation bill and an appropriation therefor made, except in an emergency. Municipal taxpayers being in equity the owners of a municipal fund, and the authorities merely trustees, who may only hold and apply the fund to the legitimate purposes of the trust, a bill by a taxpayer will lie to enjoin such authorities from misappropriating it. An unauthorized expenditure of municipal funds may be restrained, though warrants have issued. Where private property must be acquired by a village for a local improvement, to be paid for, in whole or in part, by special assessment, Hurd's Revised Statute, 1905, expressly requires that title thereto shall be obtained by condemnation proceedings, and the provision may not be defeated by an attempt to purchase the property and pay for it out of funds derived from general taxation.—Supreme Court of Illinois.

#### SEWER IMPROVEMENT

**Northwestern University vs. Village of Wilmette.**—An estimate of the cost of a sewer improvement was not insufficient as failing to provide for the cost of repairing the streets used and of removing the surplus earth taken from the ditches, where it provided a lump sum for lawful expenses attending the improvement, in addition to items for sewer pipe, etc., and the ordinance provided the work should be done in a good and workmanlike manner. Where an ordinance is uncertain and open to two constructions, a court will adopt the one which will uphold the ordinance's validity. A "local improvement" is a public improvement which through its being confined to a locality enhances the value of adjacent property, as distinguished from benefits diffused by it throughout the municipality, and though a system of sewers to relieve the congested condition of existing sewers by furnishing additional means, whereby the surface water caused by excessive rain may be carried away, may benefit all the property in a village, if the improvement will specially enhance the adjacent property, it is local and may be paid for by special assessment.—Supreme Court of Illinois.

#### WHARVES ON MADE LAND—TAXATION

**Western Maryland Tidewater R. Co. vs. City of Baltimore.**—The Code Public General Laws give to proprietors of lands bordering on navigable waters the accretions thereto and the exclusive right to make improvements into the waters in front of their respective land, which improvements shall pass to the successive owners of the land to which they are attached as incident thereto, etc. A railroad owning land bordering on a navigable river erected permanent piers, resting on piles and extending beyond high-water mark, and attached to the land which was in the city of Baltimore, whose boundaries, as fixed by the acts of 1816, ran with the river. Held, that the boundaries of the city were coincident with those of the piers, and they were taxable as a whole by the city.—Court of Appeals of Maryland.

#### STREET IMPROVEMENT LIEN—IRREGULARITIES

**Baum vs. City of Lexington.**—Where an insane person's land was sold to satisfy a street improvement lien at an adequate price, and it is to her interest that the sale be confirmed, it will not be set aside on the ground that the committee's answer was defective because it admitted the allegations of the complaint, and did not show that he was unable to make a defense, as expressly required by Civic Code Practice, where the defect was supplied by the subsequent answer of a guardian ad litem, since Civic Code Practice provides that defects in proceedings, not affecting substantial rights of the adverse party, shall be disregarded.—Court of Appeals of Kentucky.

#### AUTHORITY OF MUNICIPAL BOARD

**American Electric Co. vs. City of Waseca et al.**—The Water and Light Board of the city of Waseca is, under the provisions of the charter of the city, clothed with the exclusive superintendence, control, and management of the city water and light plant, and authorized to enter into such contracts for and on behalf of the city, within the limitations contained in the said charter, as the members thereof deem for the public interests. The Mayor of the city is not a member of the board, nor has he authority, under the charter or otherwise, to cancel or rescind a contract duly made by the board within the scope of its authority. Though the board is but an agency of the city, it may, under the provisions of the charter, sue and be sued, and this action was properly brought against it. The provisions of the charter limiting the indebtedness to 10 per cent. of the assessed valuation of taxable property, supersedes the provisions of the General Statutes, and the limit by which the city is controlled is that fixed by the charter.—Supreme Court of Minnesota.

#### STREET RAILWAY FRANCHISE

**Los Angeles Ry. Co. vs. City of Los Angeles.**—A city in granting a street railway franchise is only an agency of the State, and, if there is any conflict between the granting ordinance and the general laws of the State, the State laws will govern. When failure to complete a street railway within the time prescribed in the franchise ordinance works an *ipso facto* forfeiture of the uncompleted portion of the right of way, the city cannot be restrained from interfering with laying of tracks thereon or from removing tracks unlawfully laid; the railroad not being in possession and having no right to lay tracks thereon.—Supreme Court of California.

#### VALIDITY OF SCAVENGER ORDINANCE

**State vs. Several Parcels of Land, Etc.**—An ordinance of the city of Plattsmouth recited that it was passed under and by virtue of an act which was afterwards declared unconstitutional. Irrespective of the power granted by the unconstitutional law, the City Council had the power under the previous statute to enact the ordinance. Held, that the mistake in reciting the power to act did not operate to deprive the City Council of the power which it actually had under the existing law. In an action under the Scavenger law for the collection of delinquent city taxes, the presumption is that the tax was legally levied and assessed, and the burden is upon the defendant to plead and prove affirmatively facts showing the lack of authority upon the part of the city authorities to levy the tax. Where the existence of a municipal corporation is not questioned by the State, it cannot be brought in issue by a private individual in a collateral proceeding; nor can the validity of annexation proceedings be tested in such a suit, where the evidence shows acquiescence in the proceedings and the payment of taxes levied by the corporation for several years.—Supreme Court of Nebraska.

#### CHANGE OF GRADE—BASIS FOR DAMAGES

**City of Americus vs. Tower.**—In an action for damages to abutting property by a change of street grade, evidence as to the value of other abutting lots before and since the change of grade was admissible. In an action for damages to property by a change of street grade, evidence that a similar claim for damages to other abutting property had been settled was inadmissible. A petition for change of a street grade held inadmissible in an action for damages caused by the change against one not a party to the petition. That all the abutting property owners except plaintiff wanted the grade of a street changed was no defense to the city's liability for damages to plaintiff's property by such change.—Court of Appeals of Georgia.

#### POWER TO SELL WATER

**Simson vs. Parker.**—Under the Tonawanda charter, which provides that the Board of Public Works may sell a person outside the city the right under certain conditions to make connections with and draw water from the city's mains, if thereby the water supply of the city and its inhabitants shall not be insufficient, a contract imposing upon the city the obligation to furnish a corporation's plant outside the city such water as it may require during a given period, and providing that, in case of failure to furnish such water, the city shall be liable for all damages caused thereby to the corporation, is invalid, since the charter authorizes only a sale of surplus water as such surplus may exist from time to time.—Court of Appeals of New York.

### INCOMPLETE PLANS

**Gage vs. Village of Wilmette.**—In a sewer improvement proceeding, it was provided that the manhole covers should be the same as the catch-basin covers, except that the catch-basin covers should have perforated lids, while the others were to have tight lids. Plan F shows the perforated lid and top of the catch-basin, and plan G shows only a tight lid. Held, that the ordinance for the improvement, providing that the manholes should be fitted with covers with tight lids as shown by plans F and G, was not uncertain as to whether the manholes were to have tight or perforated lids.—Supreme Court of Illinois.

### INDIVIDUAL INTERESTS OF OFFICERS

**City of Greenfield vs. Black.**—The Secretary of a City Board of Health is an officer within the act for the incorporation of cities, approved March 14, 1867, declaring that no city officer shall be in any manner interested in any contract with the city, and a contract made in violation thereof to be void, and hence a contract, between a city and the Secretary of the Board, whereby the secretary is to care for smallpox patients, is void unless such an emergency exists that it would be manifestly unjust to delay action in order to comply with the strict requirements of the statute.—Appellate Court of Indiana.

### LIGHTS AT RAILROAD CROSSINGS

**Pittsburg C. C. St. L. Ry. Co. vs. Hartford City.**—Under Burns' Annual Statutes of 1901, authorizing cities to adopt an ordinance requiring railroads running through cities to maintain lights at the points where the tracks cross streets, and declaring that cities may "provide what kind of light" shall be maintained, a municipality may adopt an ordinance requiring a railroad to maintain a light at a street intersection.—Supreme Court of Indiana.

### INJUNCTION OF ENFORCEMENT OF ORDINANCE

**Princess Amusement Co. vs. Metzger, Chief of Police, Indianapolis.**—The enforcement of an ordinance prohibiting the establishment and maintenance of a skating rink will not be enjoined, where plaintiff, who contemplated erecting one, was proceeding upon the mistaken theory that the ordinance prohibited the mere erection of the rink without obtaining the city's permit, since prosecution for violation of the ordinance was not impending or imminent.—Supreme Court of Indiana.

### ILLEGAL CONTRACTS—INJUNCTION

**Bennett vs. City of Baltimore.**—Taxpayers may enjoin municipal authorities from performing an illegal paving contract, where its performance will, if not prevented, require an appropriation and expenditure of \$5,000 out of the taxpayers' money and where the assessments upon their property abutting on the street to be paved are onerous and they will be required to bear their share of the proportion of the cost of the paving to be paid out of the general tax levy.—Court of Appeals of Maryland.

### PRICE PAID FOR IMPROVEMENT

**City of Jamestown vs. Arter.**—A city sued to recover the amount paid a contractor for the building of a sidewalk, on allegations that he had obtained payment on the fraudulent representation that he had constructed the sidewalk according to his contract, which provided that the work should be done under the direction of the Sidewalk Committee and Street Commissioner, and the price was to be paid when the work had been approved by them. The contractor was paid on the certificate of the Street Commissioner after such approval. Held, that the city was bound thereby in the absence of fraud. In an action by a city to recover an amount paid a contractor for the building of a sidewalk, where the city gave no evidence that the material was not suitable, and the evidence of defendant showed it was proper, though not the material specified in the contract, and the contractor was paid on a certificate by the Street Commissioner after approval by the Sidewalk Committee, no fraud is shown on the part of the contractor. Where the city, under a resolution of its Common Council certifying that an abutting owner had been benefited in excess of the cost of a sidewalk, assessed the amount of such benefit, with 10 per cent. added, on the abutting owner, thus receiving the benefit of the contract for the erection of the sidewalks, it is precluded from maintaining an action to recover from the builder of the sidewalk the price paid therefor.—Supreme Court of New York.

### PUBLIC STREETS—INTERURBAN ROADS

**Kinsey vs. Union Traction Co.**—The extensive development of interurban railroads is gradually narrowing the distinction between the rights of commercial railroads, or so-called steam railroads, and street railroads proper, as interurban roads in many instances partake of the nature of both. One of the main contentions was whether or not interurban cars, operated on the streets of a city with its permission, for the carriage of passengers, express, and light freight, by a corporation unorganized under the street railway laws, constituted an additional servitude on the streets so as to entitle abutting owners to additional compensation for the use of the streets. Three of the Judges. Chief Justice Hadley, Justices Gillett and Monks, were of the opinion that the operation of the cars did not constitute an additional servitude, while two judges, Justices Jordan and Montgomery, held the contrary.—Supreme Court of Indiana.

### ASH RECEIVING STATION—NUISANCE

**Saal vs. South Brooklyn Ry. Co.**—A judgment enjoined defendants from maintaining an ash-receiving station in such manner as to cause a nuisance to plaintiff's property, and provided that, if the nuisance should be continued, plaintiff might apply for a modification of the judgment, so as to absolutely forbid the use of the station. Subsequently, on plaintiff's application, it was ordered that such modification be made, and the court found that the nuisance continued up to the hearing of such application, that it was a daily violation of the former judgment and a contempt of court, and that plaintiff's rights were prejudiced, and referred the question of plaintiff's damages, if any; the question of punishment to await further report. Held, that the last decision was essentially a judgment, and hence appealable. A contempt is a wilful disregard or disobedience. To constitute constructive contempt of court, some act must be done, not in the presence of the court or judge, that tends to obstruct the administration of justice, or bring the court or judge or the administration of justice into disrespect. To find one guilty of constructive contempt of court in disobeying an order thereof, the proof must show beyond reasonable doubt that defendant wilfully refused to do what was directed. In an action to enjoin a nuisance, where a referee's report is confirmed by the court, the adjudication necessarily rests on such report, although it is not binding upon the court. Contempt should not have been adjudged against defendants, who were previously enjoined from maintaining an ash-receiving station in such manner as to cause a nuisance to plaintiff's property, though the method of operating the station was not beyond criticism, where many of the defects upon which the injunction was based had been minimized to harmlessness, and marked improvements had been made at large expense. A city may maintain an ash-receiving station within the city, in disposing of ashes, household and street sweepings, and rubbish, if the method adopted does not create a nuisance. It was improper to absolutely forbid the maintenance of an ash-receiving station used by a city in disposing of ashes, household and street sweepings, and rubbish, where, since a previous injunction against its use in such manner as to cause a nuisance to plaintiff's property, nearly all the objectionable features of the station have been obviated, and such as remain may be obviated, and where the annoyance to plaintiff is insignificant, if not imaginary, since an injunction restraining the conduct of a legitimate business should go no further than is absolutely necessary to protect the rights of him seeking the injunction.—New York Supreme Court, Appellate Division.

### STREET IMPROVEMENT—BENEFIT ASSESSMENT

**In re Avenue D in New York City.**—New York Charter, Laws of 1901, provides that in a street opening proceeding the Commissioners of Estimate and Assessment shall not assess any lands for benefits more than one-half the value thereof as valued by them. Held that, for the purpose of assessing benefits, the value of property not taken must be determined on the basis of what it is worth after the street extension is made and the title to the land has vested in the city.—New York Supreme Court, Appellate Division.

### COUNTY BRIDGE IN CITY LIMITS

**Town of Jackson vs. Breathitt County.**—A grant by a town to a county of the privilege of erecting a bridge on a street of the town constituting a highway of the county necessary for the public generally of the town and country is not a franchise, within the constitution, prescribing the conditions on which a town or other municipality may grant a franchise, though the county collects toll or leases the bridge.—Court of Appeals of Kentucky.

## MUNICIPAL APPLIANCES

### Leadite

AN economical composition for pipe joints has been manufactured for several years by the Leadite Company, Heed Building, 1215 Filbert street, Philadelphia, Pa. As its name suggests, it is a substitute for lead to be used in making joints of water pipes. The weight of the composition is 118 pounds per cubic foot—as compared with 708 pounds, the weight of lead. As the joints are generally made deeper with leadite, 2 1-2 as compared with 1 1-2 inches, in practice one-fourth as much composition by weight is used as when lead is employed. Leadite is melted and poured into the joint in the same manner as lead, but no calking is required, as the composition takes a strong hold on the iron pipe. A temperature of 400° F. is sufficient to melt the material, and a higher temperature should not be used because the material gets thick and sticky; when cooled again, however, to 400° F., the former, a liquid condition similar to that of oil, returns. Owing to the light weight it is desirable to use a pouring gate of clay about three inches higher than the top of the bell, in order to get sufficient pressure to fill the joint properly. All dirt and grease must of course be removed from the bell and spigot ends in order to give the leadite a good grip. Tests of pipe which have been jointed with leadite show excellent results. For example, a line laid at the water works yard at Philadelphia, after two years use, when subjected to a pressure of 300 pounds per square inch, showed no leakage. To test resistance to shock and vibration, two pieces of extra heavy 6-inch pipe, five feet long, were dropped eight feet on a log. When a pressure of 130 pounds was applied the joint remained dry. A test for strength was made on a line of pipe at the Master Streets Water Works yard, Philadelphia, by striking the bonnet on the end of the line with a heavy sledge ten times in an attempt to knock it off, but without success. About four miles of water mains laid thirteen years ago in Philadelphia have been examined several times to find if there were any leaks. Not one leak was ever found in the work.

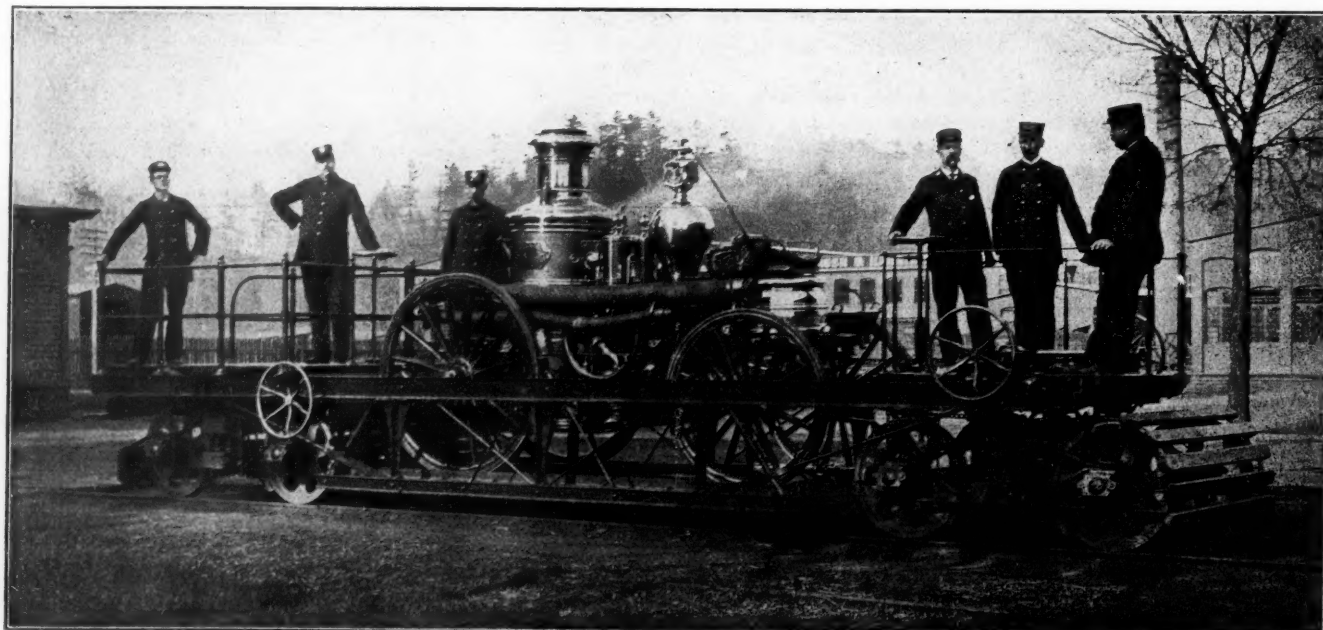
### Tools of English Design

DETAILS in designs of contractors' tools used for municipal or other work, which originate among men working along the same lines in different localities, present points of interest. Some-

times advantage in design for special purposes is apparent at a glance, while in other cases the cause of the differences is obscure. The Phoenix Engineering Co., Ltd., Chard, England, publishes a catalogue of its municipal and other appliances, in a number of which some excellent ideas are shown. For example, the Phoenix Portable Rapid Bitumen Boiler has a device consisting of tubes properly arranged for carrying the gases distilled off back into the fire, effecting a saving of fuel and avoiding a nuisance. A portable hand carriage for tar buckets has wheels as high as the bucket, insuring steadiness in handling. A tar sprinkler for road tarring is modeled along the ordinary lines of a kettle, with the addition of a perforated pipe and a suitable valve. A storm-proof danger lantern mounted on a tripod, with each leg provided with a pin to fasten it to the ground, would have saved many damage suits if used by American contractors. A pipe transporter with screw lift, while not entirely unlike pipe wagons used here, looks as if it might be peculiarly suitable for work with a small force of men. A drain testing apparatus consists of a double action bellows and copper cylinder, which is used as a firebox, contained in a tank filled with water. A float is placed over the firebox, which acts as a holder for the air and smoke, and also serves to indicate whether the drain is absolutely or partially air tight. A method of mounting contractors' hand lift pumps on portable frames like a wheelbarrow varies from American practice. It is intended for use where it is necessary to quickly move the pump from one point to another. Similar pumps, besides being mounted on the wheelbarrow frame, are set up on more substantial platforms with four wheels.

### Fire Engine Car

A SPECIAL car for quickly transporting fire engines to the outskirts of a city and to other points in reach of street car lines has been placed on the market by the Wason Manufacturing Company, Springfield, Mass. It consists of two trucks with platforms, to the rear one of which the platform for carrying the engine is attached. To load, the platform is lowered to the rails, the front truck disconnected and moved out of the way. The engine is drawn into place with a winch on the rear truck. The rear truck is brought back. Chain hoists, operated by right and left screws, raise the front end of the platform, and the side girders are fastened. The car has been loaded in 2 1-4 minutes and unloaded in 1 1-4.



Length over platform railings, 28 feet 8 inches. Extreme length from edge of foot board to fender, 30 feet 10 1-2 inches. Height from rail to top of engine platform, 9 1-2 inches. Length and width of engine platforms, 13 feet 9 inches by 6 feet 11 inches. Width of car over channel beams, 7 feet 10 inches. Extreme width over hoisting wheels, 8 feet 6 1-2 inches. Weight of car, 14,000 pounds.

## NEWS OF THE SOCIETIES

**League of Virginia Municipalities.**—Samuel R. Buxton, Mayor of Newport News, Secretary of the League, has issued an announcement regarding the coming convention. The letter reads in part as follows:

The third annual convention of the League of Virginia Municipalities will convene in Richmond on January 15, 1908. Reports indicate that this meeting will be the largest and most successful in the history of the organization. Since the last convention, held in Newport News, many of the cities and towns of the State have become identified with the movement and it is confidently expected that at the meeting in January practically every municipality in Virginia will be represented. The wisdom of this organization should be established in the minds of thoughtful men, in that it furnishes a school wherein the city official may be taught. Every city official should be a student of municipal government. There are many things to be learned. The line which separates failure from success in a given administration is too often the line which separates ignorance from intelligence. It is the purpose of this League, by the interchange of friendly ideas, by comparison of experiences and discussion of the more serious problems met with in the administration of municipal affairs, to assist the city official to the end that he may render the best possible service to his community.

In the opinion of the writer, no city or town in the State which desires the best things in municipal government can afford to slight the opportunity afforded through this League of bringing these best things to pass. The community of interest between the municipalities of Virginia is such as to make a careful study of the problems which confront any given municipality helpful to every other municipality. The League of Virginia Municipalities is not content with the striving after the improvement or betterment of conditions in the several cities and towns of the State, though its constant endeavor will be to bring and keep the municipalities of Virginia abreast of the best municipalities of the country. It endeavors to teach the truth that every community has a duty to the body politic.

**Machinery Club of New York City.**—The greater part of the upper two floors of the Hudson Terminals Building, Fulton and Church streets, New York City, have been engaged by the club for the purpose of providing a pleasant meeting place for members of the metal trades and their friends. Theodore Waters, 26 Cortlandt street, is secretary of the club.

**National Association of Cement Users.**—The fourth annual convention will be held in the old Sixty-fifth Armory and the Teck Theater Building, Buffalo, N. Y., January 20-25. The exhibition in the armory will be the largest ever held. The technical meetings will be held in the theater on Tuesday, Wednesday, Thursday and Friday mornings and evenings. The papers to be read so far as announced are as follows:

Cement Sidewalks; C. W. Boynton, Chicago.

Elementary Mechanics of Reinforced Concrete; Prof. W. H. Hatt, Purdue University.

Factory Built Concrete; W. H. Mason, Stewartville, N. J.

The Necessity for Continuity in the Steel Reinforcement of Concrete Structures; a discussion.

Concrete as a Plastic Material for the Expression of Architectural Ideals; I. K. Pond, Chicago.

Treatment of Concrete Surfaces; a discussion.

Artistic Effects in Reinforced Concrete; R. F. Tucker, New York.

Architectural Concrete in Landscape Work; a discussion.

Waterproofing Cement Structures; a discussion.

Practical Methods in the Erection of a Reinforced Concrete Building; H. H. Fox, New York.

The Unit vs. the Loose Bar System of Reinforced Concrete Construction; E. G. Perrot, Philadelphia.

**Underwriters Electrical Association.**—The annual meeting will be held in New York City in March. The National Elec-

tric Code will be the principal subject for consideration. Members desiring to make suggestions are requested to forward them to C. W. Goddard, Secretary, 55 Kilby street, Boston, Mass., before February 1. The meeting will be open and all persons interested are invited to attend.

**American Historical and American Political Science Associations.**—Delegates to the number of 300 from all points in the United States met at Madison, Wis., December 27, to attend the sessions of the historic, economic, political science, sociological and labor associations. On the opening day the two societies held a joint meeting. The address of welcome was delivered by Edward Berge, of the Wisconsin University. J. Franklin Jameson, President of the Historical Society, delivered the annual address. "The Future of Representative Government" was the subject of the address of Frederic N. Judson, President of the Political Science Association. Speaking of the referendum he said that the referendum, although useful as a preventive of bad legislation, could not be substituted for legislative discretion in matters of detail. Effective public control could be secured by diminishing the number of elective offices and by public service reform in the cities. The problem of public service corporations was discussed by Commissioner Thomas M. Osborne, of New York; Senator George B. Hudnall, of Superior, Wis., and Senator W. H. Hatton, of New London.

**Iowa Tax Revision Association.**—Frank G. Pierce, of Marshalltown, Secretary of the League of Iowa Municipalities, announces that the first annual meeting of the Iowa Tax Revision Association will be held at Des Moines, Tuesday, January 21. City Treasurer F. T. True, of Council Bluffs, will read his paper on taxation, which he read before the meeting of the League in Council Bluffs. The Iowa Tax Revision Association was organized about a year ago, and now has a considerable membership size. All persons who are interested in tax revision are eligible to membership. Mr. Pierce is Secretary of the Association and invited Mr. True to read his paper before the meeting at Des Moines.

**American Institute of Electrical Engineers.**—The next meeting will be held in the auditorium of the Engineers' Building, 33 West Thirty-ninth street, New York City, on Friday, January 10, at 8 p.m. The following papers will be presented: "The New Haven System of Single-Phase Distribution with Special Reference to Sectionalization," by W. S. Murray, electrical engineer of the New York, New Haven and Hartford Railroad Company, and "A New Single-Phase Railway Motor," by Ernst Alexanderson, electrical engineer, General Electric Company, Schenectady, N. Y. The following persons will take part in the discussion: Lewis B. Stilwell, O. S. Lyford, Jr., D. B. Rushmore, W. B. Potter, B. G. Lamme, Albert H. Armstrong, S. M. Kintner, and others. A memorial meeting in honor of the late Lord Kelvin will be held at an early date. Further announcement will be made by Ralph W. Pope, Secretary.

## Calendar of Meetings

January 7-8.

**Michigan Engineering Society.**—Annual meeting, Battle Creek, Mich.—Alba L. Holmes, Secretary, 574 Wealthy avenue, Grand Rapids.

January 8.

**New England Water Works Association.**—Annual meeting, Hotel Brunswick, Copley Square, Boston, Mass.—Willard Kent, Secretary, 715 Tremont Temple, Boston, Mass.

January.

**Iowa Engineering Society.**—Annual meeting, Des Moines.—A. H. Ford, Secretary, Iowa City.

January 8-10.

**National Commercial Gas Association,** New York City.—Gas exhibition and convention.—Lucius Bigelow, Secretary, 265 Broadway, New York City.

January 14-16.

**Illinois Clay Workers' Association.**—Thirtieth annual convention, Peoria, Ill.

January 15.

**American Society of Civil Engineers.**—Annual meeting, New York City.—Charles Warren Hunt, Secretary, 220 West Thirty-seventh street, New York City.

January 15-17.

**Illinois Society of Engineers and Surveyors.**—Annual meeting, Champagne, Ill.—E. E. R. Tratman, Secretary, 1636 Monadnock Block, Chicago, Ill.

January 16-18.

**Indiana Engineering Society.**—Annual meeting, Indianapolis.—Charles C. Brown, Secretary, 408 Commercial Club Building, Indianapolis.

January 20-25.

**National Association of Cement Users.**—Fourth annual convention at Buffalo, N. Y.—W. W. Curtis, 585 Caxton Bldg., Chicago, Secretary; Dal H. Lewis, 760 Main street, Buffalo, N. Y., Convention Manager.

January 21.

**Iowa Tax Revision Association.**—First annual meeting, Des Moines, Ia.—Frank G. Pierce, Secretary, Marshalltown, Iowa.

January 21-23.

**American Society of Heating and Ventilating Engineers.**—Annual meeting, Engineering Societies Building, 29 West Thirty-ninth street, New York City.—W. M. Macay, Secretary, 29 West Thirty-ninth street, New York.

January 22-23.

**Iowa Brick and Tile Association.**—Twenty-seventh annual convention, Des Moines, Iowa.—C. B. Platt, Secretary, Van Meter, Iowa.

January 28-30.

**Canadian Society of Civil Engineers.**—Annual meeting, Montreal, P. Q.—Prof. C. H. McLeod, Secretary, 577 Dorchester street, Montreal.

February 3-4.

**American Ceramic Society.**—Twenty-second national convention, Hartman Hotel, Columbus, O.—Theo. A. Randall, Secretary, Indianapolis, Ind.

February 3-4.

**National Paving Brick Manufacturers' Association.**—Southern Hotel, Columbus, O.—Theo. A. Randall, Secretary, Indianapolis, Ind.

February 11-13.

**Ohio Engineering Society.**—Annual meeting, Great Southern Hotel, Columbus, O.—E. G. Bradbury, Secretary, 85 North High street, Columbus, O.

## PATENT CLAIMS

874,226. **Reinforced Concrete Construction.** John W. Muldoon, New York, N. Y. Serial No. 381,045.

A reinforced concrete column, comprising a plurality of reticulated metal baskets placed one upon the other and each filled with concrete after having been placed in position and before the next successive basket is placed in position.

873,974. **Tramway.** Ferdinand Wolff, Mannheim, Germany. Serial No. 399,711.

A tramway provided with a rope impregnated with a preserving material and extending between the rail and the road bed, substantially as specified.

874,397. **Water Conveyer.** John O. Dove, Cooleage, and Charley Wirsing, Fort Worth, Tex. Serial No. 360,176.

In an apparatus of the class described, the combination of an endless conveyer, a motor for driving the same, and means for loading the conveyer gradually.

874,497. **Device to Prevent Sea-Dumped Garbage from Being Thrown Onto the Beach.** Samuel E. Gladding, Jersey City, N. J. Serial No. 364,295.

A device of the class described, comprising a floating frame adapted to receive a dumping scow or scows, said floating frame being provided at its sides with downwardly inclined plates which extend into the water in which the frame floats.

## THE WEEK'S CONTRACT NEWS

Relating to Municipal and Public Work—Street Improvements—Paving, Road Making, Cleaning and Sprinkling—Sewerage, Water Supply and Public Lighting—Fire Equipment and Supplies—Buildings, Bridges and Street Railways—Sanitation, Garbage and Waste Disposal—Police, Parks and Miscellaneous—Proposals and Awards

To be of value this matter must be printed in the number immediately following its receipt, which makes it impossible for us to verify it all. Our sources of information are believed to be reliable, but we can not guarantee the correctness of all items. Parties in charge of proposed work are requested to send us information concerning it as early as possible; also corrections of any errors discovered.

### BIDS ASKED FOR

STATE	CITY	RECEIVED UNTIL	NATURE OF WORK	ADDRESS INQUIRIES TO
<b>Street Improvements</b>				
Indiana.....	Rockville.....	January 9, 1 P.M.	Constructing roads in several townships.....	H. A. Henderson, County Auditor.
Minnesota.....	St. Paul.....	January 9, 2 P.M.	Grading Aldine St., University to Taylor Ave.....	R. L. Gorman, Clk., Bd. Pub. Wks.
Indiana.....	Kokomo.....	January 9.....	Constructing gravel roads, Liberty and Harvard twps.....	Wm. L. Benson, County Auditor.
Pennsylvania.....	Findley.....	January 9.....	Constructing Roseburg pike, Mercer County.....	Jos. W. Hunter, Harrisburg, S.H. Com.
Maryland.....	Fort Washington.....	January 10, 2 P.M.	Resurfacing macadam roads in post.....	Constructing Quartermaster.
Indiana.....	Noblesville.....	January 11, 10 A.M.	Draining and graveling 2 roads; costs, \$3,401 and \$3,610.....	N. W. Coghill, County Auditor.
Indiana.....	Knox.....	January 11, noon.....	Constructing 14 miles of gravel roads.....	Lee M. Ransbottom, Co. Auditor.
Pennsylvania.....	McKees Rock.....	January 11, noon.....	Bldg. highway tunnel, approaches and drainage Stowe twp.....	R. J. Maconbray, Town Clerk.
New York.....	Patchogue, L. I.....	January 14.....	Plans, etc., and bldg. shore driveway, 1,425 x 6 ft.....	J. Fred Flugrath, Village Clerk.
New York.....	Fort Hamilton.....	January 15, 11 A.M.	Grading and removing stone wall.....	Capt. Chas. T. Baker, Q. M., U. S. A.
New York.....	Brooklyn.....	January 15, 11 A.M.	Regulating, grading, curb, sidewalks, various streets.....	Bird S. Coler, Boro. Pres.
Missouri.....	Joplin.....	January 15.....	Grading, macadamizing, etc., various streets; cost, \$30,000.....	N. B. Spillman, City Engineer.
Idaho.....	Lewiston.....	January 16, 10 A.M.	Constructing J. Roth road in Road District No. 8.....	W. L. Gifford, City Clerk.
Pennsylvania.....	Washington.....	January 17, noon.....	Bldg. improved roadbed, culverts, bridges, etc., 3 miles road.....	H. R. Campbell, County Clerk.
New York.....	Albany.....	January 20, noon.....	Improving public highways.....	Fred'k Skene, State Eng'r.
Indiana.....	West Lafayette.....	January 20.....	Paving South St., and Northwestern Ave.....	Chas. T. Stallard, Town Clerk.
New York.....	Albany.....	January 23, noon.....	Improving public highways.....	Fred'k Skene, State Eng'r.
West Virginia.....	Wheeling.....	January 25, 11 A.M.	Paving, grading, guide walls, etc., Dam 13, Ohio River.....	Capt. F. C. Boggs, U. S. Eng'r.
Massachusetts.....	Attleboro.....	February 1.....	Constructing South Attleboro road.....	Board of Selectmen.
Pennsylvania.....	Erie.....	February 4, 3 P.M.	Brick paving, concrete walls, etc., steamboat landing.....	H. T. Leasure, Sec'y Dock Com.
Montana.....	Billings.....	February 4, 5 P.M.	Constructing 86,653 sq. yds. gravel macadam; 3,000 lin. ft. sewer, complete, etc., 17,400 lin. ft. gutter, complete.....	J. D. Matheson, City Clerk.
Montana.....	Billings.....	February 4, 8 P.M.	Constructing 6,305 sq. yds. shale brick pavement.....	J. D. Matheson, City Clerk.
California.....	Santa Monica.....	February 15.....	Asphaltum, 2,000 sq. yds. on concrete, inc. curb, etc., \$6,000.....	Thomas H. James, City Engineer.
<b>Water Supply</b>				
New Jersey.....	Morris Plains.....	January 9.....	Furn. 1,500 ft. 6-in. water main, tees, hydrants, etc.....	Geo. W. Jagle, Chm. State Hospita
Arizona.....	Phoenix.....	January 10, 4 P.M.	Laying cast-iron water pipe.....	Robt. A. Craig, Supt. Water Dept.,
Maryland.....	Annapolis.....	January 14.....	Water pipe system at Naval Academy, Sch. 674.....	Bureau Supplies and Accts., Navy Dept., Washington, D. C.
North Carolina.....	Maxton.....	January 15.....	Bldg. water works and sewer system; cost \$50,000.....	R. M. Williams, Mayor.
Nebraska.....	Wood River.....	January 15.....	Constructing water works and electric light plant; cost, \$17,000.....	D. D. O'Kane, Village Clerk.
Manitoba.....	Winnipeg.....	January 15.....	Furnishing 15 miles of assorted water pipe.....	H. N. Rutnan, City Engineer.
Oregon.....	Rainier.....	January 15.....	Constructing water system.....	Dean Blanchard.
Manitoba.....	Winnipeg.....	January 15.....	Furnishing 200 6-in. and 25 8-in. fire hydrants.....	M. Peterson, Sec'y Bd. Control.
Illinois.....	Aurora.....	January 17.....	New air compressor for pumping station.....	M. J. Tarble, City Engineer.
Alabama.....	Fort Morgan.....	January 21, 2 P.M.	Constructing concrete cisterns.....	Capt. L. F. Garrard, Jr., U. S. A.
Alaska.....	Ft. W. H. Seward.....	January 22, 11 A.M.	Constructing a water supply system.....	Maj. W. S. Wood, Q. M., U. S. A.
Florida.....	Fort Barrancas.....	January 24, 11 A.M.	Constructing 200,000-gal. rein. concrete reservoir.....	Lt. A. L. Rhoades, Q. M.
Ontario.....	Toronto.....	January 28, noon.....	Furnishing 6,000,000 and 15,000,000-gal. vertical, triple-expansion engine for high level and main stations.....	C. H. Rust, City Engineer.
Colorado.....	Las Animas.....	February 1.....	Constructing water works, to cost \$67,000.....	W. R. Murphy, City Engineer.
<b>Sewerage</b>				
Minnesota.....	St. Paul.....	January 9, 2 P.M.	Constructing Warrendale sewer system, inc. sewers in portions 10 streets; also sewer in Duchess St.....	R. L. Gorman, Clk., Bd. Pub. Wks.
Ohio.....	Newark.....	January 9.....	Sewerage plumbing and wiring at high school annex.....	David M. Keller, Clk., Bd. Educ.
Wisconsin.....	Grand Rapids.....	January 11.....	Constructing ditch 4,700 ft. long.....	W. E. Wheelan, Clk., Bd. Pub. Wks.
Ohio.....	Steubenville.....	January 13, noon.....	Constructing sewer in Fifth St.; also in several alleys.....	T. W. Vance, Clk. Bd. Pub. Serv.
Indiana.....	La Porte.....	January 13, 7:30 P.M.	Constructing tile sewer in Chicago St.....	Walter Baker, City Clerk.
Iowa.....	Clinton.....	January 14.....	Bldg. 3,500 ft. 12 to 36-in. sewer, 46 catch basins, etc.....	Charles P. Chase, City Engineer.
California.....	Oakland.....	January 15, 11 A.M.	Constructing extension to East Side sewer; \$7,500 bond.....	W. B. Fawcett, Sec'y Bd. Pub. Wks.
Kansas.....	Fredonia.....	January 15, 6 P.M.	Furnishing material and constructing system of sewers, including septic tank.....	Burns & McDonnell, Kan. City, Mo.
North Carolina.....	Maxton.....	January 15.....	Constructing \$50,000 sewer system and water works.....	J. M. Bandy, Laurinburg, Engr.
Philippine Isds.....	Manila.....	January 19, noon.....	Twelve pumps and motors for new sewer system.....	J. F. Case, Chief Engineer.
Montana.....	Billings.....	February 4, 5 P.M.	Sewer, 3,000 lin. ft., 12 manholes, 15 catch basins, etc.....	J. D. Matheson, City Clerk.
<b>Public Buildings</b>				
New Jersey.....	Trenton.....	January 8, 3 P.M.	Steam-heating apparatus, etc., for Federal Building.....	James Knox Taylor, Wash., D. C.
Pennsylvania.....	Harrisburg.....	January 8.....	Constructing fire house.....	T. F. Ferree, Bldg., Inspector.
Illinois.....	Chicago.....	January 10, noon.....	Erecting addition to Dante school.....	D. H. Perkins, Tribune Bldg., Arch.
New York.....	New York.....	January 10, 2 P.M.	Repairing roof, etc., Eighth and Thirteenth Regt. Armories.....	Armory Board, Hall of Records.
Wisconsin.....	Coloma Station.....	January 10, 8 P.M.	Labor and material for erecting school building.....	C. H. Williams, Portage, Architect.
Ohio.....	Columbus.....	January 10.....	Furn. material and erecting greenhouse in Schiller Park.....	E. F. McGuire, Sec'y Bd. Pub. Serv.
Arkansas.....	Fort Smith.....	January 11, noon.....	Erecting a \$65,000 school; 16-room, 2 story and basement.....	A. Klingensmith, Architect.
New York.....	Fort Wood.....	January 11, 11:30 A.M.	Erecting, complete, double set Captain's quarters.....	G. C. Burnell, Q. M., U. S. A.
Massachusetts.....	Fort Andrews.....	January 14, 10 A.M.	Erecting, plumbing, heating, etc., brick barrack bldg.....	Capt. Ira L. Frendenall, Boston, Q. M.
Nebraska.....	York.....	January 14, 3 P.M.	Constructing, complete, U. S. Post Office.....	James Knox Taylor, Wash., D. C.
Michigan.....	Flint.....	January 15, noon.....	Erecting 12-room grade school, except heat and ventilating.....	W. C. Lewis, Sec'y Bd. Education.
Texas.....	Houston.....	January 15, 3 P.M.	Constructing, complete, Federal Building.....	James Knox Taylor, Wash., D. C.
Wisconsin.....	Brillion.....	January 15.....	Bldg. 2-story and basement, pressed brick school; cost, \$12,000.....	C. H. Tegen, Manitowoc, Archt.
Ohio.....	East Liverpool.....	January 17, 3 P.M.	Constructing, complete, U. S. Post Office.....	James Knox Taylor, Wash., D. C.
North Carolina.....	Asheville.....	January 20, 3 P.M.	Constructing, complete, Federal Building.....	James Knox Taylor, Wash., D. C.
Virginia.....	Richmond.....	January 20, 3 P.M.	Constructing new high school building; cost \$350,000 to \$400,000.....	Chas. K. Bryant, Architect.
Indiana.....	Auburn.....	January 20.....	Erecting 4-room brick school building.....	F. M. Bines, School Trustee.
North Dakota.....	Rolla.....	January 20.....	Erecting brick school, stone foundation.....	C. R. Galibus, District Clerk.
Georgia.....	Gainesville.....	January 21, 3 P.M.	Constructing, complete, U. S. Post Office.....	James Knox Taylor, Wash., D. C.
South Dakota.....	Mitchell.....	January 22, 3 P.M.	Construction, inc. plumbing, wiring, etc., U. S. Post Office.....	James Knox Taylor, Wash., D. C.
Illinois.....	Paris.....	January 24.....	Erecting high school building on South Main St.....	Board of Education.
Montana.....	Missoula.....	January 27.....	Constructing new \$150,000 Co. Court House of standstone.....	County Clerk.
Illinois.....	Chicago.....	January 28, 11 A.M.	Erecting brick and stone isolation hospital; separate bids.....	John J. Hanberg, Com'r Pub. Works.
Michigan.....	Mt. Pleasant.....	January 30, noon.....	Erecting physical training bldg., Cen. Mich. Normal School.....	Luther L. Wright, Sec'y State Bd. Ed.
Indiana.....	Terre Haute.....	February 1.....	Constructing 2-story additions to 3 school bldgs.....	J. G. Vrydaugh, Architect.
Georgia.....	Cairo.....	February 1.....	Erecting \$40,000 County Court House; also \$13,000 jail.....	Alex. Blair, Macon, Architect.
Illinois.....	E. St. Louis.....	February 1.....	Erecting school, to cost \$65,000.....	Riester & Rubach.
North Carolina.....	Durham.....	February 1.....	Erecting \$140,000 hospital, donated by Geo. W. Watts.....	Kendall, Taylor & Stevens, Boston, Mass.
Ohio.....	Youngstown.....	February 8.....	Constructing Court House for Mahoning County.....	J. Stambaugh, Chm. Co. Com'rs.
Arkansas.....	Conway.....	February 15.....	Erecting a \$40,000 school building.....	City Clerk.
Utah.....	Ogden.....	February 17, 3 P.M.	Constructing addition to Federal Building.....	James Knox Taylor, Wash., D. C.
Massachusetts.....	S. Hadley Falls.....	February 22.....	Competitive plans for combination Town Hall and School bldg; also for 4-room school, with assembly hall, etc.....	M. J. Judge, Sec'y Sp. Com.

## Bridges

South Dakota..	Redfield.....	January 10, noon....	Labor and material for bldg. all Co. bridges during 1908.....	W. J. Bingham, County Auditor.
Nebraska.....	Wayne.....	January 10.....	Building and repairing all bridges for County in 1908.....	County Clerk.
Missouri.....	Bible Grove.....	January 20.....	Bldg. 28-ft. span; also repairing old bridge.....	C. C. Critz, County Commissioner.
Idaho.....	Marsh (Sw't P.O.)	January 13.....	Repairing south pier, Marsh and Ireton bridge.....	County Clerk.
Montana.....	Dillon.....	January 14, 10 A.M....	Bldg. 2 steel bridges, one 96 ft. long with raised floor and stone abutments; other with concrete abutments.....	Beaverhead Co. Com'rs.
Nebraska.....	Geneva.....	January 14.....	Furn. material and erecting all Co. bridges bent and pile, steel and wooden, required during year com. January 14, 1908.	W. C. Peterson, Clk. Bd. Co. Supevr.
Ohio.....	Napoleon.....	January 15, 11 A.M....	Constructing sub and superstructure: 17-ft. span; 16-ft. roadway; 40 degrees right skew; cost, \$1,032.97.....	F. J. Beck, County Auditor.
Ohio.....	Dayton.....	January 15, noon....	Re-erecting 2 old spans, Stratford Ave. bridge, etc.; also for 730 cu. yds. steel rein. concrete, inc. excavation, etc.....	T. M. Paxton, Pres. Bd. Pub. Serv.
Nebraska.....	Fremont.....	January 15, noon....	Furn. material and bldg. all bridges for County during 1908.....	C. O. Boe, County Clerk.
Louisiana.....	Alexandria.....	January 16, 4 P.M....	Bldg. steel highway bridge on concrete piers, Bayou Rapids.....	Ira W. Sylvester, Rapides Bank Bldg.
Pennsylvania.....	Washington.....	January 17, noon....	Bridges, culverts, etc., three miles of Dry Run road.....	Wm. Wylie County Engineer.
Ohio.....	Sandusky.....	January 18, 10 A.M....	Approaches and roadway over Monroe St. bridge.....	Charles Kubach, County Auditor.
Ontario.....	L'Original.....	January 21, noon....	Bldg. 120 or 125-ft. iron span; also removing old 80-ft. span and placing same on new abutments; also concrete or stone masonry work for Big Castor bridge.....	E. Abbot Johnson, Co. Clerk.
Tennessee.....	Nashville.....	January 22, 3 P.M....	Bldg. 2 bridges, inc. 4 spans; deck plate girders, 53' 2"; one 70-ft. deck plate girder; 2 rolled I-beams; 4 through truss spans, 175 ft.; 1 deck truss, 98' 7"; two 318-ft. through truss spans; 5,000 tons each.....	H. M. Jones, Eng'r, C. R. Br. Com.
British Col'bia..	Victoria.....	January 31.....	Erecting bridge, north arm of Fraser River.....	F. C. Gamble, Eng'r Pub. Wks.
Missouri.....	Old Monroe.....	February 1.....	Erecting bridge over Cuivre River, Charles Co.....	Lincoln County Com'rs.
New York.....	Le Roy.....	February 1.....	Plans, etc., for bridge over Oatka river, will pay \$250.....	Philo J. Sperry.
Missouri.....	St. Charles.....	February 13.....	Erecting Cuivre River bridge at Old Monroe; cost, \$8,000.....	County Commissioners.

## Lighting and Electricity

Ontario.....	Toronto.....	January 9, noon....	Rewiring Parliament Building.....	H. F. McNorton, Sec'y P. W. D.
Ohio.....	Newark.....	January 9.....	Electric wiring, plumbing, etc., high school annex.....	David M. Keller, Clk., Bd. Educ.
Dist. of Col'bia..	Washington.....	January 9, noon....	Equipment for light, heat and power plant for U. S. Capitol, etc.	Elliott Woods, Superintendent.
Nebraska.....	Wood River.....	January 15.....	Constructing \$17,000 electric light and water works plant.....	D. D. O. Kane, Village Clerk.
Pennsylvania.....	Donora.....	January 15.....	Constructing overhead line from Donora to Eldora.....	B. M. Hanna, Pres. St. Ry. Co.
New York.....	Troy.....	January 17.....	Lighting Broadway approach until midnight.....	E. J. Sweeney, City Clerk.
Dist. of Col'bia..	Washington.....	January 20, 10:30 A.M.	Furn. engine and generator, exciter, storage battery, incandescent globes, etc., Isth. Canal Com'n.....	H. F. Hodges, Gen. Pur. Agt.
Ohio.....	Ashland.....	January 20, noon....	Placing 50 gas lamps in sts. and lighting, 5-10 years.....	A. P. Black, Village Clerk.
Dist. of Col'bia..	Washington.....	January 21, 2 P.M....	Installing complete electric wiring, new Nat'l Museum.....	Bernard R. Green, Supt. Constr.
Louisiana.....	Lecompte.....	February 1.....	Constructing electric light plant, to cost about \$10,000.....	Baldwin Wood, New Orleans, Eng'r.
Pennsylvania.....	Homestead.....	February 3, 7:30 P.M.	Lighting streets of borough for 1, 3 and 5 years.....	Andrew Hill, Boro. Clerk.
Indiana.....	Indianapolis.....	February 4, 10 A.M....	Installation direct current generator, dir. con. to steam unit (engine or turbine), foundations, steam connections, switchboard, etc., Cen. Ind. Hosp. for Insane.....	Bd. Trus. Cen. Hosp. for Insane.

## Miscellaneous

New York.....	New York.....	January 8, 10:30 A.M.	Furn. 2,400 ft. 2½-in. rubber fire hose.....	F. J. Lantry, Fire Com'r.
Arizona.....	Ft. Huachuca.....	January 9, 11 A.M....	Constructing a swimming pool.....	C. A. H. McCauley, Ch. Q. M. Denver, Col.
Minnesota.....	Jackson.....	January 9, 11 A.M....	Steel and wood furniture for new Co. Court House.....	H. G. Anderson, Chm. Co. Bd.
New York.....	New York.....	January 10, noon....	Furnishing iron and steel, iron castings, hardware, bolts, nuts, etc., for Dept. Street Cleaning.....	Foster Crowell, Commissioner.
California.....	Los Angeles.....	January 10, 2 P.M....	Transportation of 352,470 tons of freight for Los Angeles Aqueduct, involving bldg. standard broad gauge r.r., 155 miles long; cost, \$2,500,000 from Mojave to Lone Pine; freight will amount to 20,000,000 ton miles at 6 cts.; cost, \$1,200,000 for transportation.....	H. B. Ferris, Sec'y Bd. Pub. Wks.
Indiana.....	Indianapolis.....	January 10.....	Making and placing Indiana monuments on Vicksburg field.....	H. C. Adams, Chm. Mon'mt. Com'n.
North Carolina..	Wilmington.....	January 10.....	Two 6-pocket bottom-dump scows.....	Capt. E. I. Brown, Eng. Corps.
New York.....	New York.....	January 13, 11 A.M....	Removal snow and ice, Boro. of Queens.....	Jos. Bermel, Boro. Pres.
New York.....	Fort Wood.....	January 13, 1:30 P.M.	Purchase and removal of four bldgs. at post.....	Lt. Wm. W. Bessell, Signal Corps.
Ohio.....	Columbus.....	January 14, noon....	Design, construction, delivery and erection of garbage reduction works, capacity 100 tons per 24 hours.....	Henry Maetzel, Ch. Engr. D. P. S.
California.....	Oakland.....	January 15, 10 A.M....	Furn. 3 comb. chemical and hose wagons; also 3 second-size steam fire engines and water-tube boiler.....	W. B. Fawcett, Sec. Bd. Pub. Wks.
Missouri.....	St. Joseph.....	January 15, 11 A.M....	Furn. 2,500 ft. 2½-in. fire hose, couplings, complete.....	John B. Ryan, Pres. Bd. Pub. Wks.
Michigan.....	Grand Rapids.....	January 15, 3 P.M....	Furn. stone for pier filling and riprap, various harbors.....	Maj. Chas. Keller, U. S. Engineers.
California.....	Santa Monica.....	January 15.....	Constructing new pier, inc. new outfall sewer pipe; cost, \$100,000.....	Thos. H. James, City Engineer.
Rhode Island..	Providence.....	January 18, 3 P.M....	Installing vacuum cleaning system, Federal Bldg.....	James Knox Taylor, Wash., D. C.
New York.....	Brooklyn.....	January 18.....	Bldg. new drydock, 15 per cent. completed; cost, \$757,800.....	Wm. M. Smith, Chief Clerk, Bureau Yards and Docks, Navy Dept., Washington, D. C.
Dist. of Col'bia..	Washington.....	January 20, 10:30 A.M.	Furn. various material, Isth. Canal Com'n, Cir. 412.....	H. F. Hodges, Gen. Pur. Agt.
Rhode Island..	Providence.....	January 20, 11 A.M....	Furn. and del. 245,000 ft. B. M. yellow pine lumber.....	W. F. Slade, Com'r Pub. Wks.
Ohio.....	Cincinnati.....	January 20, 2 P.M....	Raising crest of lock and dam No. 3, Big Sandy River, near Louisa, Ky., and constructing steel gates for lock.....	Col. J. G. Warren, U. S. Eng'rs.
West Virginia..	Wheeling.....	January 25, 11 A.M....	Bldg. guide walls, grading, paving, etc., Dam No. 13, Ohio River.....	Capt. F. C. Boggs, Corps Eng'rs, U. S. A.
Iowa.....	Des Moines.....	January 25, 11 A.M....	Furn. service hook and ladder truck, complete.....	Geo. F. Porrmann, City Clerk.
Pennsylvania.....	Erie.....	February 4, 3 P.M....	Constructing public steamboat landing 500 ft. long, 100 ft. wide, including dredging, timber, cribs filled with rock, filling between cribs, concrete walls and brick pavement.....	H. T. Leasure, Sec'y Erie Dock Com.
Missouri.....	St. Louis.....	February 11, noon....	Furn. tools, labor, machinery and buildings for reduction of garbage for a term ending Sept. 1, 1918.....	W. B. Dryden, Sec'y Bd. Pub. Imp. Argentine Legation, Wash., D. C.
South America..	Buenos Ayres.....	May 1, 2 P.M....	Bldg. 2 underground electric railways, etc.....	

## STREET IMPROVEMENTS

**Hartford, Conn.**—Resolutions have been passed providing for the macadamizing of Ashton terrace, Harvard street and Mountain street.

**Chicago, Ill.**—Ordinances have been passed for improving the following streets: Wentworth avenue, between Root street and Garfield boulevard, granite blocks, estimated cost \$191,000; Maxwell street, between Canal and Morgan streets, asphalt, \$48,500; Lock street, between Archer avenue and Thirty-first street, asphalt, \$11,500; Greenwood avenue, from Sixtieth to Sixty-fifth streets, asphalt, \$32,500; Lexington avenue, from Sixty-first street to Sixty-fifth street, asphalt, \$30,500; Woodlawn avenue, from Sixtieth street to Sixty-seventh street, asphalt, \$54,000; a paving system for a section of Ravenswood, at a cost of more than \$200,000, has also been approved.

**Gibson City, Ill.**—It is proposed to lay about 36,087 square yards brick pavement, at a cost of \$60,000 to \$70,000.—C. F. Helman, Paxton, Engineer; William A. Davidson, City Clerk.

**Indianapolis, Ind.**—Resolutions have been adopted for graded gravel roadway, brick gutters, cement walks and curb in Steele street, from Brookside to Massachusetts avenue; for brick roadway in first alley north of Twelfth street, from second alley west of Lafayette street, north to Missouri street; for graded roadway and curb in Union street, from Tabor street to point 157.72 feet south of Kelly street; for brick roadway in first alley north of Twelfth street, from Illinois to second alley west of Lafayette street, north; for brick roadway and curb in Smith street (second alley north of Twelfth street), from Missouri street to canal.

**Indianapolis, Ind.**—Bids will soon be asked by the Board of Public Works for the fol-

lowing street work: For graded gravel roadway, brick gutters, cement walks and curb in Steele street; same in Union street; for brick roadway in first alley north of Twelfth street; same in second alley north of Twelfth street, and for cement walks in Butler avenue.

**Peoria, Ill.**—Council has directed plans, etc., to be prepared for improving Addison street by paving; estimated cost of improvements, \$30,000.

**Topeka, Kan.**—Twenty-seven and a half blocks of new paving for 1908 are already in prospect. Petitions for 14½ blocks are on file, while petitions are being circulated for the remainder. The largest single stretch of paving, or rather repaving, which is under contemplation is that of West Sixth avenue, which is now or once was paved with red cedar blocks. Cedar blocks as a paving material represented a new era in Topeka, as far as paving material was considered at that

time. However much it was esteemed at the time, the paving has not proved an unalloyed success, and it will give way to brick. The base is good, and the repaving cost should not be heavy. There are 11 blocks on West Sixth avenue which will be torn up and give way to the brick. In the consideration of a schedule for paving next year, John Rogers recommends that the repaving be granted first consideration.

In the following blocks, petitions for which are on file, the city at large will have to bear the expense of paving eleven intersections: Eleventh street, Polk street to Topeka avenue; Garfield avenue, Thirteenth to Fifteenth street; North Jackson, Morse to St. John street; Thirteenth street, Harrison to Topeka avenue; Harrison, Huntington to Twelfth street; Lane street, from Eighth avenue to Sixth avenue; Monroe street, Tenth avenue to Twelfth street; West Tenth avenue, west from the alley between Spruce and Pine to Woodward avenue; alley bounded by North Kansas avenue, Jackson, Laurent and Norris. By resolution Council will call for the paving of Western avenue, from Sixth avenue to Eighth avenue.

**Kalamazoo, Mich.**—During the coming year Washington avenue will be paved, as well as West Vine street; the brick pavement on Burdick street, from the Michigan Central tracks to South street, will have to be relaid; Douglas avenue and Church street will be paved.

**St. Louis, Mo.**—Specifications for the improvement of Forest Park boulevard, from Grand avenue to Boyle avenue, are being prepared by the Street Commissioner; the plan is to have a 50-foot planting space in the center, a driveway of 30 feet, and a sidewalk 20 feet wide on each side of the street.

**J. A. Travilla, Street Commissioner.**

**Gloucester City, N. J.**—Council is preparing to issue \$75,000 bonds for street improvements.

**Berne, N. Y.**—The Town Board is preparing to issue \$10,000 road improvement bonds.

**Columbus, O.**—Henry C. Maetzel, City Engineer, has prepared plans and specifications to abolish grade crossings; the following companies are interested: Toledo and Ohio Central Railway Company, Hocking Valley Railway Company, Baltimore and Ohio Railroad Company, the Columbus Railway and Light Company, the Scioto Valley Traction Company, and the Ohio Electric Railway Company.—R. H. Simpson, Assistant City Engineer, Engineer in Charge.

**Dayton, O.**—The Clerk is about to advertise for bids for the unfinished portion of curb and gutter on Keefer street.

An ordinance has been passed by Council for improving Bacon street, from Clinton to Detroit, with new curb and paving the roadway with brick, Bituminous macadam, sheet asphalt, crosotted wooden block, plain macadam or broken stone; also Jackson street, from Richard street to Burns avenue.

An ordinance has been passed authorizing an issue of \$18,500 street bonds.—John N. Betscher, President of the Council.

**East Liverpool, O.**—Willis Davidson, City Engineer, will prepare plans and specifications for paving Seventeenth street.

**Lockland, O.**—Engineer Cowan has submitted plans, estimates and profiles for the improvement of Stout avenue with cement curb and gutters.

**St. Bernard, O.**—Bids will be received, January 20, for the purchase of \$6,000 5 per cent., 30-year sewer and sidewalk bonds.—Geo. Schroeder, Village Clerk.

**Toledo, O.**—Council is preparing to authorize an issue of \$150,000 boulevard bonds.

**Wellsville, O.**—The City Solicitor has been instructed to prepare preliminary legislation for paving Third street; legislation also for the paving of Riverside avenue is to be introduced.

**Altoona, Pa.**—Ordinances passed by Council provide for paving Lexington alley, between Ninth and Tenth street; Crawford avenue, between Fifth and Ninth street; Seventeenth alley, between Union and Eleventh avenues; and Ninth street, between Twenty-first and Twenty-fifth avenues, and regulating the setting and inspection of curbing.

**Palestine, Tex.**—Bids will be received, March 20, for the purchase of \$50,000 4 per cent. paving bonds.—S. P. Allen, City Secretary.

**Stamford, Tex.**—At the election, December 18, with reference to voting the \$20,000 bond issue for street improvement, the voters were practically unanimous in favor of the issue, the vote standing 20 to 1 in favor of the issuance of the bonds; as soon as possible the bonds will be issued and the needed improvement will be made without delay.

**San Antonio, Tex.**—Galveston, Harrisburg and San Antonio Railway Company will erect steel viaduct.—D. K. Colburn, Houston, Engineer in Charge.

**Norfolk, Va.**—Redgate avenue, from Colley to Matsaca, will be paved with granite blocks, at a cost of \$17,730.

**Seattle, Wash.**—R. H. Thomson, City Engineer, has reported upon the estimated cost of the following street improvements: Utah street, et al., planking, \$12,000; Twenty-fourth avenue, North, et al., water mains, \$2,335; Thirty-fourth avenue, South, et al., water mains, \$4,720. Ordinances have been passed ordering the following street improvements: Madison street, sandstone block paving, \$21,500; Phinney avenue, et al., hydrants to existing mains, \$20,200; Thirty-sixth avenue and East Terrace street, water mains, \$7,300.—M. H. Strouse, Clerk to City Engineer.

**Green Bay, Wis.**—Council has under consideration estimates for paving a large number of streets during the year of 1908.

## SEWERAGE

**Sacramento, Cal.**—The city has voted \$200,000 bonds to complete the sewer system.—George Randall, City Engineer.

**Selma, Cal.**—The City Engineer has prepared plans for sewer system, estimated to cost \$60,000.

**Monticello, Ill.**—The Board of Local Improvements is considering construction of main sewer in Hamilton street and lateral sewers in a number of cross streets.

**Morton Park, Ill.**—The Board of Local Improvements has approved plans for a 6-foot sewer six miles long, from Austin to the Chicago drainage canal; total cost, \$248,000, of which the city of Chicago is expected to pay \$140,000.

**Logansport, Ind.**—John Schmidt, City Engineer, is making surveys for proposed North Side sewer.

**Muncie, Ind.**—The Board of Public Works has ordered plans for the construction of a large sewer in west part of city.

**New Albany, Ind.**—The Board of Public Works proposes to extend sewer system.

**South Bend, Ind.**—Council is considering extending Kenwood avenue trunk sewer so as to provide drainage for West End territory near city limits.—A. J. Hammond, City Engineer.

**Louisville, Ky.**—The Sewer Commissioners have awarded contract for the construction of Section B of the southern outfall sewer to T. B. Jones & Co., St. Louis, Mo., for \$295,594.13, and have instructed their engineers to have everything prepared for letting contracts on the Campbell street outlet for the Beargrass intersection by February. The contracts for the remaining sections of the sewer will be let as rapidly as possible, as enough bonds have been sold to cover the cost of construction. The sewer will be the second in the city to be built of concrete, the first being the Happy Hollow drain, now nearing completion. The length of time before the completion of the entire sewer is contingent to a large extent upon the sale of the sewer bonds. The bond issue was \$4,000,000, with a provision for a rate of 4 per cent. interest, and a sale of \$1,000,000 of the issue the first year, \$1,500,000 the second, and the remainder as rapidly as the Commissioners saw fit. So far the bond issue of \$1,000,000 for the first year has not been disposed of, \$300,000 still remaining to be subscribed. The entire \$700,000, already taken, is held by Louisville people.

**Arcadia, La.**—The land owners of Arcadia have organized a company to establish drainage system in Sixth Ward.—J. G. Medlenka, Chairman.

**Lake Charles, La.**—Plans are being prepared for sewerage system.—John H. Poe, Chairman.

**Springfield, Mass.**—The Board of Public Works has voted to recommend the laying of a small sewer on the east side of Stearns park, connecting with Worthington street sewer.

**Hastings, Mich.**—City Engineer McVean has prepared new sewer plan for city.

**Kalamazoo, Mich.**—Bids will be received, January 13, for the purchase of \$21,000 5 per cent. sewer bonds; also \$50,000 4½ per cent. improvement bonds.—Sidney R. Ketchum, City Clerk.

**Vicksburg, Miss.**—Preliminary surveys have been completed for sewer system for this city; \$250,000 bonds have been voted for installing system.—Henry Trowbridge, City Clerk; W. G. Kirkpatrick, Jackson, Consulting Engineer.

**Gloucester City, N. J.**—At a special session of Council plans and specifications were adopted for constructing sewers, water and fire mains, grading, macadamizing and gutting East Brown, East Bergen, Chambers, Gaunt, Somerset, Catherine and Francis streets.

**Newton, N. Y.**—The election for bonds has been postponed, and the amount reduced. The election will be January 31, the amount of bonds \$45,000.

**Dunkirk, N. Y.**—Bids are to be asked shortly for constructing 10-inch tile sewers in Beaver, Zebra and East Second streets.

**Niagara Falls, N. Y.**—The Board of Estimate and Apportionment has authorized the issue of \$70,000 bonds to cover the cost of constructing a tunnel trunk sewer for the relief of the factories in the Echota district.

**Spencerport, N. Y.**—The incorporation papers of the Spencerport Water Company, which is to install a system of water works and sewerage, have been signed and returned from Albany. Representatives of the company will meet with the Board of Trustees of the village in a few days and the necessary arrangements for the installation of the water and sewer plants will be made; it is the intention to begin work as soon as weather permits in the spring of next year.

**Syracuse, N. Y.**—Bids will be asked in the spring for the construction of intercepting sewers; estimated cost, \$500,000.—Glenn D. Holmes, Chief Engineer, Intercepting Sewer Board; Henry C. Allen, City Engineer.

**Carthage, O.**—The first decisive step toward the construction of a sewer system has been taken by the Village Council; Engineer Cowen has submitted a plan and estimates the cost at about \$100,000; it has not yet been decided whether the system will consist of a combined sanitary and storm sewer or simply a storm sewer.

**Elyria, O.**—Council has taken steps for construction of sewers in Perry Court and Taylor street extension.

**Hudson, O.**—The place is to receive a gift of \$100,000, part of which will be used for installing sewage disposal plant.

**Lima, O.**—The Board of Health has made a request that the Board of Public Service immediately construct an additional sewer to take care of the refuse from the County Infirmary; the cost of the structure is roughly estimated at about \$7,000.

**Lockland, O.**—Mayor Taylor announces that Engineers Riggs and Sherman, of Toledo, have submitted plans for sewerage the city; no definite action has been taken by Council in reference to this improvement.

**Wyoming, O.**—Estimates are being prepared by Riggs & Sherman, of Toledo, for proposed sewer system.

**McAlester, Okla.**—The question of issuing \$25,000 of bonds for enlarging present sewer system and providing sewage disposal grounds will probably be voted on this spring.

**Norman, Okla.**—An election will be held, February 11, to decide the question of issuing \$85,000 bonds for the extension of the sewer and water systems.

**Altoona, Pa.**—Favorable reports were made by the Public Works Committee on Ordinances providing for construction of sewer in Twenty-first avenue, between Twelfth street and First District sewer; in Fifteenth alley, between Fourteenth street and branch of First District sewer; in Eighteenth street, between northwest city line and Twentieth avenue; in Twenty-first alley and Washington avenue; in Nineteenth street, between Twentieth and Monongahela avenues; repealing ordinance No. 1242, which authorized the reduction of the sidewalk on the northwest side of Thirteenth avenue, and construction of a retaining wall along same from the northwest line of property No. 1406 to southwest line of property of No. 1316, and annexing a portion of the Fifth Ward to the city.

**Doylestown, Pa.**—A. M. Thomas, Superintendent Doylestown Sewerage Company, has asked Council for an extension of Taylor street to Church street, in order that the company could lay a sewer trench in the street.

**Mt. Olivet, Pa.**—The Borough Council, at a special meeting, considered plans for the sanitary sewer system submitted by Engineer Wolff. The system will cover eight miles of territory, and it will be necessary for the borough to issue bonds in order to complete the work; the Engineer was instructed to furnish an estimate of the cost of the system, and it is likely that the matter will be submitted to the taxpayers of the borough at a mass meeting, which will be held in the near future.

**Macbeth, Pa.**—The Town Council will proceed with the work abandoned in the contracting firm of Shea & Co.

**New Cumberland, Pa.**—Plans are being prepared for the construction of a new sewer system; estimated cost, \$30,000.

**Reading, Pa.**—Owing to completion of extensions in new sewer districts, this city will add a second acre to its sewerage disposal plant, at a cost of about \$40,000.

**Camden, S. C.**—Bids will be received, January 15, for the purchase of \$50,000 5 per cent., 40-year sewerage bonds.—J. J. Goodale, City Clerk.

**Dallas, Tex.**—Mayor Hay is obtaining data in the matter of sewage disposition, and he expects to be ready to place before the people

at the April election a chance to approve of some plan of disposal other than that of turning into the Trinity.

**Denton, Tex.**—Work on the construction of sewer system in this city will be started soon; Col. M. P. Kelly, Gainesville, Tex., has the franchise, and will install the system.

**Aberdeen, Wash.**—Bids will be received, January 8, for \$31,628.37 sewer bonds.—P. F. Clark, City Clerk.

**Janesville, Wis.**—Estimates are being prepared by C. V. Kerch, City Engineer, for extensional sewers, estimated to cost \$60,000.

**Carleton Place, Ont., Can.**—The Town Council is considering a by-law to raise \$200,000 for the installation of a sewage and water works system for this town.

**Toronto, Ont., Can.**—C. H. Rust, City Engineer, has recommended the construction of an overflow sewer from the University creek sewer eastward to the Don river, at an estimated cost of \$200,000.

**Vancouver, B. C.**—Council has voted the following amounts for public improvements to be completed during 1908: Sewers, \$400,000; concrete walks, \$100,000; pavements, \$300,000.

## WATER SUPPLY

**Eureka Springs, Ark.**—A committee has been appointed by Council to secure estimates for increasing the water supply and for purifying it.

**La Junta, Col.**—The Arkansas Valley Water Supply and Power Company has been incorporated, with a capital of \$500,000, for the purpose of securing water supply for several towns.—James McNeen, Organizer.

**Las Animas, Col.**—Water works, to cost \$67,000, are to be constructed for this city; bids will be asked about February 1.—W. R. Murphy, City Engineer.

**Canton, Ga.**—A \$30,000 bond issue has been authorized for installing water works, sewers and electric lights.

**Chicago, Ill.**—The Union Stockyards Company will build a plant for the purpose of purifying the water of Bubbly creek; estimated cost of improvement, \$100,000.

**Woodstock, Ill.**—It is proposed to construct a sewerage system, to cost about \$80,000.—W. S. Shields, 1201 Hartford Building, Chicago, Ill., Engineer; Lynn Richards, City Clerk.

**Beloit, Kan.**—The citizens have voted \$50,000 4½ per cent., 10 to 20-year light and water bonds.

**Hutchinson, Kan.**—The People's Water, Light and Power Company proposes to extend its mains.

**Moorehead, Ky.**—Council proposes to establish water system, estimated to cost \$15,000.

**Versailles, Ky.**—Council has directed the Holmboe Company, of Louisville, to prepare plans and specifications for water system, estimated to cost \$60,000.

**New Orleans, La.**—Bids will soon be asked for a 4,000,000-gallon direct-acting compound-condensing pumping horizontal engine for the Algiers water purification station.—George C. Earl, General Superintendent, Sewerage and Water Board.

**Baltimore, Md.**—The city and county authorities are discussing an agreement for the construction of a 20,000,000-gallon reservoir in the Gunpowder river valley and the application to the Legislature for permission to raise \$5,000,000 for acquiring the water rights.

**Gloucester, Mass.**—Taking advantage of the low market prices, the Water Commissioners have decided to purchase 6,000 feet of 1-inch, 2,000 feet of 1½-inch, 6,000 feet of 2-inch, and 200 feet of 3-inch water pipe; an order was given the Lynchburg Foundry Company for 1,000 feet of 14-inch cast-iron pipe and 1,000 feet of 4-inch cast-iron pipe, at \$27 per ton.

**Marion, Mass.**—The town is to install water works; Col. Henry E. Converse is interested.

**Winthrop, Mass.**—The Town Board has authorized an issue of \$134,000 bonds for the purchase of the Revere Water Company's plant.—Address Secretary.

**Saginaw, Mich.**—The Board of Water Commissioners has directed estimates to be prepared for laying additional water mains.

**Speed, Miss.**—The matter of issuing \$30,000 bonds for water system is under consideration.

**Spencerport, N. Y.**—The Spencerport Water Company, which is to install a system of sewerage and water works in the village has been incorporated at Albany; work is to begin in the spring.

**Lenoir, N. C.**—Bids will be received, February 15, for the purchase of \$60,000 6 per cent., 30-year water bonds.—J. C. Seagle, Secretary.

**Maxton, N. C.**—The city has voted bonds for water plant; estimates have been prepared by J. M. Brady, of Greensboro, N. C.

**Minot, N. D.**—Council has taken the first steps looking to the construction of a \$150,000

water plant, that will be up-to-date in every respect. Plans and specifications for a complete system, taking in the whole city, were presented to Council by City Engineer Severance and Mr. Crab, of Fargo, who have been working on the matter for some time. The plans provide for ten miles of water mains, extending from the cemetery on the south hill to north of the lakes on the North Side, and taking in East Wood park, the east end of Valley street, Nedrud avenue and Jarvis and Ward streets. The plans call for 127 hydrants and for a standpipe holding 100,000 gallons. There may be a change in the capacity of the standpipe, as several of the Aldermen believe it is too small, taking into account the probable growth of Minot during the next five years.

**Akron, O.**—The town of Hudson has voted in favor of giving that village, free of cost, a complete water works, sewerage and electric lighting system, which is to cost \$125,000; this is the gift of J. W. Ellsworth, a millionaire, made on condition that the city exclude the sale of liquor hereafter.

**Ashtabula, O.**—Plans in detail are now at the office of the water company for a filtration plant for the city; the plans call for a building 60x108 feet, in which is to be installed apparatus for the capacity of 6,000,000 a day, including one wash water tank 25x25, two sedimentation tanks 42x25, two steel settling tanks 42 feet in diameter and 25 feet high, and eight filters; the filter building will be erected on the beach between the present pump house and the lake; it is expected to make this improvement in the spring.

**Mansfield, O.**—The Mansfield Railway, Light and Power Company proposes to spend \$100,000 in improving its power plant in this city.—S. A. Foltz, General Manager.

**Orrville, O.**—L. E. Chapin, of Canton, has submitted a report to the Board of Public Service covering an estimate for the cost of piping water from the new well on the Ore farm to West Market street; the estimate is \$2,500; the distance is 2,000 feet; a \$200 pump and 1,200 feet of 6-inch pipe, a number of special valves and castings are among the items included in his estimate.

**Toledo, O.**—Another bond issue will be necessary to complete the fund needed to erect the filtration plant.

The Board of Public Service recently heard a verbal report from City Engineer Consaul which showed that \$253,000 is still needed to finish the filter. Consaul told the members that contracts for \$537,000 have already been let. The total appropriation was \$565,000, and the total cost will be \$818,000, asserted the Engineer, making a deficit of \$253,000.

Mr. Consaul submitted figures showing that the conduit will cost about \$174,000. For the intake pier, two items of \$16,500 and \$23,500 will be needed as well as \$25,000 for the pumping house. He mentioned also other items. Mr. Consaul and Secretary Volt were instructed to frame a report for submission to the servers, who will in turn send it to Council for that body to take some action to furnish the money necessary.

**Norman, Okla.**—An election will be held, February 11, to vote on the question for \$85,000 for the extension of water mains and sewer system.

**Fairchance, Pa.**—Bids will probably be asked in March by the City Council for the construction of water works, to cost about \$20,000.—Geo. Scudder, Uniontown, Pa., Engineer; Joseph Farrell, Clerk of Council.

**Punxsutawney, Pa.**—The Citizens' Water Company has petitioned for a charter for the purpose of establishing water system.

**Scranton, Pa.**—The village has voted a tax of 25 per cent. on the grand list to provide a water supply for fire protection.

**Bennettsville, S. C.**—City will issue about \$35,000 of bonds for construction of water works.—Address the Mayor.

**Clover, S. C.**—City contemplates laying 6-inch water mains on Main street.—Address the Mayor.

**Bronte, Tex.**—G. H. Cumberland, City Engineer, is preparing specifications for water system.

**Seattle, Wash.**—The cost of laying water mains in Twenty-fourth avenue, North, et al., is estimated at \$2,335, and in Thirty-fourth avenue, South, et al., \$4,720; Council has passed ordinance ordering hydrants to existing mains in Phinney avenue, et al., to cost \$20,200, and in Thirty-sixth avenue and East Terrace street, to cost \$7,300.—R. H. Thomson, City Engineer.

**Medford, Wis.**—Bonds, \$30,000, have been authorized to put in a complete water system.

**Edmonton, Alta.**—Bids will probably be asked in the spring for water works improvement, to cost about \$40,000.—R. R. Kelley, City Engineer.

**Swift Current, Sask.**—Galt & Smith, Consulting Engineers, Toronto, are preparing a report on a water works system, to cost \$50,000.

## LIGHTING AND ELECTRICITY

**Little Rock, Ark.**—An ordinance is being considered by Council to give a municipal electric company a 50-year heating and electric lighting franchise; the ordinance was read once and referred to the Mayor, City Attorney and Ordinance, Electric and Finance Committees.

**Springdale, Ark.**—Martin Brothers, Cleveland, have secured franchise for construction and operation of electric light plant at Springdale.

**Hayward, Cal.**—An ordinance has been signed giving the Oakland Traction Company a 40-year franchise for a double track road over Castro street.

**San Francisco, Cal.**—The Northern California Power Company is preparing to build a hydro-electric station; the station will have a capacity of 20,000 horsepower.

**Tampa, Fla.**—The Tampa Electric Company intends to make improvements to its electric light system, which will include installation of new dynamos and other equipment in power house, and laying new track; G. W. Wells, Tampa, is Local Manager; Stone & Webster, 84 State street, Boston, Mass., are General Managers.

**Millen, Ga.**—Bids will be received, January 21, for the purchase of \$30,000 5 per cent. water and light bonds.—Henry Q. Bell, Mayor.

**Harvard, Ill.**—Council has granted a franchise to Paul F. Schuster and Warren S. Stearns, of Rockford, permitting them to erect and operate a gas plant in Harvard.

**Laharpe, Ill.**—The Laharpe Electric Light and Power Company proposes to enlarge plant; new generators will be purchased.—A. L. Blythe, Manager.

**Rockdale, Ill.**—A franchise has been granted to the Economy Light and Power Company to furnish light and power to Rockdale.

**Sandwich, Ill.**—Preparation is being made to establish a gas plant, at a cost of \$20,000.

**Springfield, Ill.**—The Blackhawk Light, Heat and Power Company, of Vincennes, Ind., has been incorporated, with \$25,000 capital, in Vincennes and \$5,000 capital in Illinois.

**Crawfordsville, Ind.**—Council, at an informal session, listened to the proposition for the rebuilding of the electric light plant that was submitted by Mr. McCarthy, of Indianapolis, the western representative of the Diesel Engine Company; the proposition was merely outlined by Mr. McCarthy, and will probably be taken up more fully by Council.

**Shelbyville, Ind.**—The Shelbyville Gas Company has been formed to take over the Shelbyville Gas and Light Company, and will enlarge and rebuild the plant.

**Worthington, Ind.**—The town has decided by vote to offer the municipal lighting plant for sale at public auction; the plant cost \$75,000 several years ago, and has been operated at a loss.

**Beloit, Kan.**—The citizens have voted \$16,500 bonds for purchasing electric plant.

**Oxford, Minn.**—An ordinance has been passed authorizing an issue of \$15,000 bonds for electric light plant.

**Meadville, Miss.**—Lee Rush, of Henderson, Tenn., is organizing a stock company to establish an electric plant.

**Natchez, Miss.**—The municipal lighting plant report and detail estimate, now being prepared by Krumbhaar & Alken, New Orleans, La., calls for 150-light series alternating arc equipment.

**Oxford, Miss.**—An ordinance has passed Council authorizing an issue of \$15,000 electric light bonds.

**Nebraska City, Neb.**—Improvements will be made to the Citizens' Gas Company's gas plant; estimated cost, \$15,000.

**Schenectady, N. Y.**—The application of the Hudson River Electric Power Company to issue \$3,232,000 5 per cent., 40-year gold bonds to cover the expenses of extended improvements which the company intends to make was approved by the Public Service Commission of the Second District; it is the object of the power company to construct a dam and operate an electric power plant on the Sacandaga river, with electric transmission lines to Saratoga, Ballston Spa, Amsterdam, Troy, Albany, Watervliet, Mechanicsville and Schenectady.

**Barberton, O.**—A committee has been appointed to secure estimates for installing an electric light plant.

**Sallisaw, Okla.**—The Southern Light and Power Company has been incorporated, with \$30,000 capital stock, by William A. Langdon, Webster Ray, and others.

**Tulsa, Okla.**—An interurban road will be built to Lapula and to Muskogee, via Broken Arrow.

**Connellsville, Pa.**—The plant of the Connellsville and New Haven Gas and Water Company is offered for sale; the controlling

interest in the company is now held by the West Penn Electric Company; very little artificial gas is now used in Connellsville and New Haven.

**Royer, Pa.**—The Morrison Coal, Electric Light and Power Company will let contracts in March for installing an electric power plant; estimated cost of improvements, \$45,000.—Frank W. Moore, Box 557, Indiana, Pa.

**Bristol, Va., Tenn.**—The Bristol Gas and Electric Company will expend about \$100,000 in improvements, including installation of coke manufacturing plant, together with several 500 horsepower turbine engines; electricity will be manufactured; the coke plant is intended to utilize the by-products of the fuel; it is expected that 100 tons of coal will be consumed per month, and that the monthly output of coke will be between 500 and 600 tons.

**Danville, Va.**—Council will engage electrical engineer to make recommendations, with a view of either enlarging present electric light plant or erecting entirely new plant.

**Elkins, W. Va.**—The Elkins Light and Power Company is having plans prepared for erection of electric light and power plant.—John T. Davis, President.

**Cashton, Wis.**—An election will be held, Jan. 21, to decide the question of issuing \$15,000 in bonds for the purpose of establishing an electric light plant.

**Medford, Wis.**—Medford has voted in favor of issuing bonds for municipal water works by a big majority, the vote being about 2 to 1, and there is a strong sentiment in favor of buying out the electric light plant, owned by a chartered corporation, and consolidating the water and light plants as a municipal plant.

**Hamilton, Ont., Can.**—The power house of the sub-station of the Cataract Power Company at Irondale was completely destroyed by fire; it was necessary to cut off the power wires and the street railway and street lamps were out of business for more than an hour.

**Edmonton, Alta., Can.**—A site has been selected for the municipal power plant, where a 600-k.w. gas producer engine will be installed; plans and specifications for the buildings are now being prepared by R. R. Keely, City Engineer.

## FIRE EQUIPMENT

**Fort Smith, Ark.**—The Fire Chief recommends the purchase of additional fire apparatus.

**Oakland, Cal.**—The Mayor recommends an issue of \$700,000 bonds for the construction of City Hall.—Address City Clerk.

**San Francisco, Cal.**—Fire Chief Shaughnessy asks for \$977,000 to be set aside to replace Fire Department buildings destroyed.

**Sunnydale, Cal.**—A new fire company is being organized; additional apparatus will be purchased.

**Aurora, Ill.**—Fire Chief George Bang recommends the establishment of a paid Fire Department.

**Peoria, Ill.**—Council has under consideration the purchase of hose bridges for the Fire Department.

**Evansville, Ind.**—The Board of Public Works is preparing to build hose house on First avenue.

**Davenport, Ia.**—John Stolenberg, Chief of the Fire Department, recommends the purchase of 1,500 feet of hose.

**Hillsdale, Mich.**—Council has under consideration purchase of hook and ladder wagon.—S. H. Moore, City Clerk.

**Isanti, Minn.**—A Fire Department has been organized.—Andrew Ledin, Chief.

**Minneapolis, Minn.**—Council is arranging to issue \$100,000 bonds for building two engine houses.

**Cincinnati, N. Y.**—Council is arranging to build a fire engine house.

**Coweta, Okla.**—The town is without fire protection.

**Altoona, Pa.**—Council has authorized transfer of \$2,550 to provide hose for flushing streets.

Mayor Walker recently vetoed a resolution for purchase of site for a fire house at Twenty-first avenue and Fourteenth street, the price being considered too high.

**Wilkes-Barre, Pa.**—The Fire Committee has asked for an additional fire engine and two hose wagons, or two hose and chemical wagons combined.

**Chattanooga, Tenn.**—Plans are being prepared for fire hall, to be located on Montgomery avenue.

**Galveston, Tex.**—The Fire Chief recommends the purchase of two additional fire engines.

**San Angelo, Tex.**—The proposition to issue \$18,000 fire protection bonds was defeated.

## PUBLIC BUILDINGS

**Birmingham, Ala.**—The erection of a high school in Jefferson County, to cost \$50,000, is under way.

**Tusculum, Ala.**—Bids will be received, February 14, for the purchase of \$16,000 6 per cent. 1 to 6-year jail bonds.—Oscar G. Simpson, Judge.

**University, Ala.**—The Board of Trustees of the University of Alabama has rejected all bids received for erecting the engineering building and a chemical and geological laboratory building; new bids will be asked in about sixty days, to be submitted on the following: Stucco, pressed brick, stone; the two buildings are estimated to cost \$165,000.

**San Francisco, Cal.**—The Board of Education is planning the expenditure of about \$8,000,000 in school improvements.

**Chicago, Ill.**—Plans will be prepared by C. F. Herman, Architect, 326 City Hall, for a cell house for the House of Correction, Twenty-sixth street and California avenue; to be four tiers in height, 50x265 feet, of brick, stone and fireproof construction, and to cost \$150,000.

Plans for a hospital and school building to be erected at Washington street and Fifth avenue, are being prepared for the Chicago Eye, Ear, Nose and Throat Hospital, by Nimmons & Fellows, 204 Dearborn street; the building will be twelve stories high, 40x80 feet; estimated cost, \$250,000.

Holabird & Roche, Architects, Monadnock Building, have started plans for the proposed City Hall building for the city, to cost \$4,500,000.

Architect W. Carby Zimmerman, 1101 Steinway Hall Building, 17 Van Buren street, is revising plans for an armory to be built at Wentworth avenue and Thirty-fourth street for the Seventh Infantry, I. N. G.; it will cost \$150,000.

It is said that plans are being prepared by Marshall & Fox, 164 Dearborn street, for an apartment house, to be erected on Lake Shore Drive, at a cost of \$300,000.

**Collinsville, Ill.**—The proposition to issue \$35,000 bonds for high school building, carried.—Address Clerk of the Board.

**Urbana, Ill.**—Jas. M. White, of Urbana, Supervising Architect, University of Illinois, writes that plans are now being prepared for the erection of a physics laboratory and addition to the Natural History Department building, to cost about \$100,000.—W. Carby Zimmerman, Chicago, State Architect.

**Burlington, Ia.**—Architects Temple, Burrows & McLane, McManus Building, Davenport, are preparing plans for a three-story high school building, to cost \$75,000.—Richard Turpin, Secretary, Board of Education.

**Des Moines, Ia.**—Bids will be received in February or March by the Board of Public Works for the erection of the proposed city hall, to cost about \$350,000.—Proudfoot & Bird, Crocker Building, Architects.

**Amherst, Mass.**—Bids are now being received for erecting the biological and geological laboratory at Amherst College, which is to cost about \$100,000.—McKim, Mead & White, New York, N. Y., Architects.

**Melrose, Mass.**—The citizens have voted in favor of appropriating \$75,000 to erect an addition to the high school.

**St. Louis, Mo.**—Architect William B. Ittner, Board of Education Building, will soon start plans for a three-story addition to the Humboldt school building for the Board of Education; estimated cost, \$50,000.

Barnett, Haynes & Barnett, Architects, Frisco Building, are preparing plans for a four-story industrial school building for the St. Philomena's Industrial School; estimated cost, \$150,000.

**Lincoln, Neb.**—The Regents of the State University have approved plans of Professor C. R. Richards for buildings for Engineering Department, to cost \$50,000, and have ordered call for bids.

**Valentine, Neb.**—An election will be held to decide the question of issuing \$5,000 school bonds.

**Passaic, N. J.**—Seymour & Paul A. Davis, 1600 Chestnut street, Philadelphia, will prepare plans for a 3-story high school building for the Board of Education; to cost \$200,000.

**New York, N. Y.**—Plans are being prepared by Architects Trowbridge & Livingston, 424 Fifth avenue, New York, for the erection of the new penitentiary at Rikers Island, to cost \$2,000,000.

Architects McKim, Mead & White, 160 Fifth avenue, have been selected to prepare plans for the new military station and buildings to be erected on Governor's Island.

**La Moure, N. D.**—Plans have been accepted for the court house.

**Cincinnati, O.**—Architects Elzner & Anderson, Ingalls Building, have completed plans for a 2½-story brick school building to be constructed for the Board of Education; cost, \$160,000.

Edward H. Dornette, Pickering Building, has completed plans for the 3-story and basement addition to the Eighteenth District school building, to cost \$125,000.—William Grautman, Clerk, Board of Education.

**Cleveland, O.**—The Board of Education, Charles Orr, Director, has instructed F. S. Barnum, Superintendent of Buildings of the Board of Education, to prepare plans for the John Hay high school building, to cost \$300,000.

**Columbus, O.**—Plans and specifications for the proposed United States post office here have been completed by James Knox Taylor, Supervising Architect, Treasury Department, Washington, D. C., and bids will be asked for at once; the structure will cost \$400,000.

**Hamilton, O.**—Bids will be received, January 14, noon, for \$25,000 4½ per cent. Lindenwald special school district bonds.—Wm. S. Graham, President, Board of Education.

**Madisonville, O.**—The Board of Education of the Madisonville Village School District will receive bids for the service from architects for preparing plans for the construction of a \$100,000 school building; estimated cost, \$100,000.

**Wapakoneta, O.**—Plans are being prepared by Architects Marriott & Allen, Columbus, for a 2-story county infirmary building for the commissioners of Anglaize County; cost, \$65,000.

**Williamstown, O.**—The Williams school district has voted \$25,000 high school bonds.—Address Clerk of the Board.

**Hazleton, Pa.**—R. W. Taylor, of the Luzerne Engineering Company, has been selected as architect in remodeling West Hazleton school house.

**York, Pa.**—The erection of a school in the West End, to cost about \$56,000, is contemplated by the School Board.

**Manning, S. C.**—The citizens have voted \$30,000 in bonds for the erection of school house.

**Mitchell, S. D.**—The School Board has petitioned for authority to issue \$69,000 bonds for school purposes.—Address Clerk of the Board.

**Austin, Tex.**—The Attorney General's Department has approved a \$23,000 bond issue for the Jefferson County independent school district No. 6, for the purpose of securing a school house.

**Canyon, Tex.**—Randall County has voted \$53,000 of bonds for erection of Court House; brick or stone; electric fixtures.—A. N. Henson, County Judge.

**Clarksville, Tex.**—Red River County will open bids, January 14, for erection of two-story addition to present County Court House; plans by Glenn Brothers, Hugo, Okla.; stone and concrete building; fireproof; 40x60 feet; cost, \$20,000; lighting not decided.

**Dallas, Tex.**—The County Auditor has been directed to readvertise for bids for constructing new hospital at the County Farm; all bids received December 21 were too high, and were rejected by the County Commissioners.

**Del Rio, Tex.**—The Attorney General has approved of an issue of \$30,000 independent school bonds.—Address H. I. Moore.

**Dimmitt, Tex.**—The citizens have voted \$28,000 bonds for the construction of Court House.—Address County Auditor.

**Hallettsville, Tex.**—Bids will be received, February 1, for the purchase of \$18,000 4 per cent. school bonds, payable in 35 years, but optional after 5 years.—F. Y. Hill, Secretary.

**Houston, Tex.**—Geo. F. Horton, County Engineer, reports that plans for the new Harris County Court House, as prepared by Long & Mitchell, Wilson Building, Dallas, have been accepted; the building consists of basement, four stories and dome, and is of fireproof construction throughout, and will be built of concrete to base line, Texas granite to second story, and from there to roof line of pressed brick; total cost, \$500,000.

**Sagerton, Tex.**—The citizens have voted \$7,000 5 per cent. school bonds.—Address Clerk of the Board.

**Beaver City, Utah.**—The citizens have voted \$20,000 bonds for the purpose of erecting school house.—Address Clerk of the Board.

**Seattle, Wash.**—The citizens have voted in favor of issuing \$500,000 school improvement bonds.

**Wheeling, W. Va.**—Bids will be received in January for the purchase of \$200,000 4½ per cent. school bonds.—Address Clerk of the Board.

**La Crosse, Wis.**—Bids will be opened shortly by the State Board of Normal Regents, Madison, for the erection of the normal school building at La Crosse; to cost \$210,000.—J. A. Peacock, President of Board, Oconomowoc, Wis.; Van Ryn & De Gelleke, Milwaukee, Architects.

## STREET RAILWAYS

**San Diego, Cal.**—Most of the right of way in this city for the Kerckhoff Keller Railroad has been secured; a Los Angeles firm is installing an immense power plant at Huntington, on the San Luis Roy river, and the understanding is that the power for the operation of the railroad will be secured from the source.

**San Francisco, Cal.**—Secretary Norman Logan, of the Northern Railway Company, a corporation comprising the officers and directors of the Northern Electric Company, says the new company has transferred all of its properties to the Mercantile Trust Company to secure an issue of 5 per cent., 40-year bonds to the amount of \$25,000,000, so that as soon as conditions in the financial world look brighter the company will be in position to begin new construction work, including line from Chico to Red Bluff, a distance of 41 miles.

**West Point, Ga.**—The Chattahoochee Valley Railroad will extend its line from West Point, through Chambers and Randolph Counties in Alabama to Glenn in Heard County, Georgia; a bond issue of \$10,000 a mile has been authorized to take care of the cost; this will run the line through a very fine timber and farming section, and add thirty miles or so to its length.

**Washington, D. C.**—Accompanied by Capt. Jay J. Morrow, Engineer Commissioner, Representative Samuel W. Smith, of Michigan, the new Chairman of the House Committee on District Affairs, has gone over the route of the proposed street car extensions to the new Union station, and has expressed himself as being well pleased with the plan, and said it should meet with little objection.

**Lewiston, Idaho.**—Surveying has been commenced on the proposed electric line which is to connect Anatone with Lewiston, Clarkston, Vineland and Asotone, where the first work was done to ward finding a route out of the city and on to the table land on the Snake River Bluffs; the line contemplated embraces forty miles of main line and feeders; the whole system to cost not to exceed \$2,000,000 when completed, 25 per cent. of which is to be subscribed by local people, but none of which is to be paid until the line is in operation.

**Delphi, Ind.**—A number of citizens of the county, headed by A. A. Newer, have on foot a project for building an interurban line from Logansport to Frankfort, via Burlington; citizens of Frankfort have given assurance that they will take \$100,000 of the stock, and farmers along the proposed line have promised to take \$50,000 of the stock.

**Frederick, Md.**—A corps of Engineers under the direction of Theodore J. King, Superintendent of the Great Falls and Old Dominion Railroad Company, has completed a survey from Frederick to Buckeystown for the proposed extension of the Washington, Frederick and Gettysburg road from this city to Washington. The Engineers are about to cross the Monocacy river and push toward Montgomery County. The route from Frederick to Buckeystown is a straight line, three-quarters of a mile shorter than the distance by turnpike. Beyond Buckeystown the route will be to the right of the Sugar Loaf mountains on to Poolesville. It is likely that after reaching Seneca one survey will be made from the latter place to Great Falls and another will cross the river at Seneca and run down on the Virginia side to Great Falls. Dr. Llewellyn Jordan, of Washington, one of the promoters of the road, is in Frederick in the interest of the movement.—D. C. Kemp, President.

**Pittsburg, Pa.**—The Summit Park Traction Company will petition Council for franchise; the traction line, as proposed and surveyed, calls for a short line which will commence at Forbes and Shingiss street, passing over what is familiarly known as Hardscrabble, and to the approach of a magnificent bridge that is to be built, and for which plans have been prepared; the men interested in the project are chiefly Pittsburgers; President Frederick Mueller, of the Pittsburg Brewing Company, is President of the new corporation.

**Ballinger, Tex.**—The Attorney General approved and the Secretary of State filed the charter of the Ballinger-Abilene Railway Company; capital stock, \$200,000; to construct and operate line of railroad from Ballinger north to Abilene, Taylor County, a distance of about 53 miles.—C. A. Dooze, C. H. Willingham and others, Incorporators.

**Stowe, Vt.**—The Mount Mansfield Electric Railway which runs from this village to Waterbury, a distance of 10½ miles, was sold by auction for the mortgagee, the American Trust Company of Boston. A. H. Soden, of Boston, President of the street railway company, was the successful bidder, at \$20,000. It is understood that Mr. Soden plans to extend a line from Stowe to Morrisville,

a distance of eight miles. Last March C. E. Burke, of this town, was appointed receiver and George N. Dale, also of Waterbury, managed the road in behalf of the trust company. At the time the road was built the town of Stowe assisted the project by bonding itself to the extent of \$40,000.

**Clarkston, Wash.**—Survey is being made for electric line which will open up the Snake Valley country; it is the intention of the company to invest \$1,500,000 in this line, and local capital is sought to increase the amount to \$2,000,000; committees have been appointed to secure stock subscriptions from local men, and an over-subscription is probable.—Frank McKean, Engineer.

## BRIDGES

**Bessemer, Ala.**—The County Board of Revenue, Birmingham, has ordered the erection of seven county bridges, to be constructed of steel or concrete.

**Tucson, Ariz.**—Pima County will soon ask for bids on a 250-foot, 4-span, single roadway highway bridge, to be built across the Rillito.—W. C. Goetz, County Surveyor.

**San Francisco, Cal.**—A design for a bridge across East street, which would enable ferry travelers to go over the big water front thoroughfare without risking their lives in a maze of street cars and teams, has been submitted to the Street Committee of the Board of Supervisors by the Merchants' Association; the north side of Market street, west of Sacramento, will provide easy and safe entrance and exit from the bridge; if the design offered by the merchants is approved the structure will be so built that it can be changed to conform with the Burnham plan for the improvement of the lower end of Market street whenever the city decides to carry that plan out; the city has offered to contribute \$10,000 toward the cost of a suitable bridge.

**Blackshear, Ga.**—The bridge over Satilla river will probably be built at cost of about \$6,000 by the Commissioners of Pierce and Ware Counties.

**Clinton, Ind.**—The farmers of the west part of Clinton Township are circulating a petition which they will present to the County Commissioners at the next term to have a bridge built across Brulets creek.

**Wichita, Kan.**—Plans for the Chisholm creek bridge, on Douglas avenue, are being drawn up by a street railway engineer, and when completed are to be submitted to Council for approval; if approved, the street railway agrees to pay a part of the cost of the new bridge, and it is expected that work will not be much delayed thereafter.—E. H. Sawin, City Engineer.

**Boston, Mass.**—Plans for a suspension bridge, 8,400 feet in length, to rise gradually from Adams Square, crossing the harbor at the Battery wharf, and touching near Border street, East Boston, and making an air line thence to Central Square, have been submitted to the Mayor by William Jackson, City Engineer. The plans provide for freight, surface and elevated car tracks, two wagon roadways and a foot path. The grade is fixed at 3½ feet in each 100 feet; estimated cost, \$15,000,000.

**Kalamazoo, Mich.**—The Council Committee on Streets and Bridges is planning for paving to be done next year.

**Albert Lea, Minn.**—Bids will be received, January 14, for the purchase of \$10,000 6 per cent. county bridge bonds.

**Hattiesburg, Miss.**—The Bridge Committee has accepted the plans prepared by R. E. Lee, Architect, Ross Building, for the construction of three reinforced concrete bridges across Gordon creek.—J. H. Putnam, City Engineer.

**Meridian, Miss.**—The Meridian Railway & Light Company will build bridge 500 feet long over Sowashee creek, at foot of Twenty-seventh avenue.—F. L. Bailey, City Engineer.

**Dillon, Mont.**—Bids will soon be asked by the Board of County Commissioners for the construction of a steel truss bridge 96 feet long at Ryan's Canyon.

**Great Falls, Mont.**—The County Commissioners are considering the erection of five or six steel bridges at different places in the county, but have not yet fully decided at what points the bridges will be built; bids will probably soon be asked.

**Newark, N. J.**—The Commissioners are taking steps to secure a proper bridge in place of the one crossing Newark Bay.

**Albuquerque, N. M.**—The El Paso Bridge and Iron Company, represented by W. E. Robertson, submitted plans and specifications before the County Commissioners for the construction of a new bridge across the Rio Grande at Bareas, to cost approximately \$27,000, or \$33.33 1-3 per linear foot; the plans were referred to County Surveyor Pitt Ross.

**Toledo, O.**—The Board of Public Service has approved the plans for the Lake Shore

and Michigan Southern Railway bridge over the Swan creek from Monroe street to Goose Point; the structure will be a Scherz rolling bridge, and the estimated cost is \$85,000.

**Guthrie, Okla.**—Bids will soon be asked by the city for the construction of a concrete bridge on Fifth street and a steel bridge on Ninth street.

**Philadelphia, Pa.**—Council has authorized the expenditure of \$74,000 for the construction of the Twenty-ninth street bridge across the Pennsylvania Railroad tracks at Montgomery avenue.—George R. Stearns, Director, Public Works.

**Lynnville, Tenn.**—The Louisville and Nashville Railroad will erect bridge across Roberson Fork creek, near Lynnville.—A. Snellen, Bridge Inspector, Louisville, Tenn.

**Nashville, Tenn.**—The Nashville Interurban Railway is preparing to construct service bridge.

**Wheeling, W. Va.**—Charles B. Cooke, City Engineer, has prepared preliminary plans for construction of deck bridge at Market street, 66 feet wide; cost, about \$55,000.

**Brandon, Man., Can.**—The city has plans for a reinforced concrete bridge of three 90-foot spans and two 60-foot spans, with a 24-foot clear roadway and provision for street car traffic.—W. H. Shillingslaw, City Engineer.

## MISCELLANEOUS

**Sacramento, Cal.**—The Harbor Commissioners will soon advertise for bids for the purchase of \$2,000,000 4 per cent., 20-year bonds.—Address Secretary.

**Wilmington, Del.**—Bonds amounting to \$20,000 will be sold to purchase park lands.

**Joliet, Ill.**—John Freidrich, Superintendent of Streets, recommends the purchase of flushing machine for sewers.

**Indianapolis, Ind.**—The contract to remove and dispose of the refuse and garbage of the city market for the year 1908 has been awarded to Samuel Ferguson by the Board of Public Safety, at \$85 a month. Mayor Bookwalter, who was in the Board's meeting, was inclined to think that the company holding the city's general contract for garbage disposal should care for the market. Members of the Board told him that such a disposition of the market refuse and garbage had always been accompanied by constant difficulty and bickering, as the "leavings" at the market contained a great deal of refuse outside of garbage, and the general garbage contractors did not like to do this, and did not do it half the time.

**Kansas City, Mo.**—The West Side Council passed an ordinance requiring the telephone companies to bury their wires along the principal streets; work is to begin within ninety days, and the companies are given eighteen months in which to finish it.

**Altoona, Pa.**—No bids were received, December 31, for the collection and sanitary disposal of garbage for 1, 3, 5 and 10 years.—Samuel B. Taus, Secretary, Department of Health.

**Chattanooga, Tenn.**—A petition has been signed for practically all the members of the General Assembly asking that R. G. Pursley be given the contract for cleaning the city by the Board of Public Works.—Harry Van Dusen, Chairman.

**Memphis, Tenn.**—The United States Utilization and Construction Company, Vincennes, Ind., will install a plant for the reduction of dead animals and refuse matter; about \$25,000 is to be invested.

**Huntington, W. Va.**—Seasongood & Mayer have purchased \$57,000 5 per cent., 30-year improvement bonds.

**Victoria, B. C.**—Council is considering the advisability of submitting a by-law to the ratepayers, which would provide the sum of \$54,000 for the erection of an incinerator.—C. H. B. Topp, City Engineer.

## BIDS RECEIVED

**Hartford, Conn.**—The Board of Contract and Supply, December 13, opened bids on section B of the Homestead avenue sewer system, and of these the bid of A. B. Griswold, of New Britain, is the lowest, with that of William T. Ryan, of New Haven, second. The total of each bid, as computed by the Engineering Department, is as follows:—(a) brick; (b) concrete: A. B. Griswold, New Britain, (a) \$42,075, (b) \$43,475; William T. Ryan, New Haven, (a) \$50,500, \$44,900; Hartford Paving and Construction Company, (a) \$53,010, (b) \$50,210; F. B. & W. H. O'Neill, (a) \$55,000; Bunting Construction Company, Flushing, N. Y., (a) \$56,750, (b) \$51,150; Falvey & Kelley, Dorchester, Mass., (a) \$57,412.50, (b) \$60,912.50; John E. Palmer, Boston, (a) \$57,425, (b) \$53,225; A. W. Byrne, Boston, (a) \$59,850, (b) \$54,250; John F. Gill Company, Winter Hill, Mass., (a) \$61,250, (b) \$55,930; Charles G. Craib Company, Winthrop, Mass., (b) \$72,850; Coughlan & Shells Company, Boston,

Mass., (a) \$83,525, (b) \$86,325; Russell Contracting Company, New York, (a) \$85,405, (b) \$73,925; Hassan Paving Company, Worcester, Mass., (a) \$96,399, (b) \$90,799.

The details of the bid of A. B. Griswold, who was low bidder and will probably secure the contract, follow: 57-inch brick sewer, \$13.50; 57-inch concrete sewer, \$14; standard manhole, \$150; lumber, \$46; rock, \$5; overhaul, 1½ cents; Class A concrete, \$8; Class B concrete, \$7.50; days for completion, 150; approximate list of quantities: 2,800 feet 57-inch circular sewer in tunnel; 5 manholes; 135,000 cubic yards of overhaul, 100 feet; 100 cubic yards of concrete B; days required for completion figured at \$5.—F. L. Ford, City Engineer.

**New Haven, Conn.**—The following were low bids for Greene street school: Mason and carpenter, Torrington Building Company, \$64,861, with common red brick, and \$67,150 with mottled brick and Indiana limestone, with 22 cents for extra concrete footings and stone work, 18 cents for extra brick work, and 75 cents for excavating; plumbing and heating, Rourke Brothers Company, \$13,613; painting, M. Rakieten, \$995; eight bids were received for general construction, eight for heating and plumbing, and five for painting.—G. F. Hewlett, Secretary, Board of Education.

**Washington, D. C.**—A. B. Wimer, Assistant Property Clerk, opened bids recently submitted for furnishing curbing. The bids relate to straight and circular curbing, and are as follows: W. P. Evans, of Lithonia, Ga., 97 cents per foot for straight, \$2 per foot for circular; Wise Granite Company, of Wise, Warren County, N. C., 99 cents and \$1.30; Georgia Granite Company, of Atlanta, Ga., 99 cents and \$1.30; Bragdon, Fernald & Gordon, of Franklin, Me., \$1.20 and \$1.60. The bids will be taken under consideration, and the bidders will be asked to furnish samples.

Two bids were received for furnishing four life-sized imitation bronze lions to be erected at the approaches to the new Connecticut avenue bridge, and it is likely that both of them will be rejected. The bid of the W. H. Mullin Company, of Salem, O., which was \$3,990, is considered by the authorities to be too low, and apparently represents a cheaper product than the Commissioners desire to have ornament the approaches to the bridge. The second bid, made by the J. L. Mott Iron Works, which has offices in this city, was \$9,428, and is considered to be too high. The Commissioners have \$8,000 to spend for these lions, and they may ask for other bids.

**Louisville, Ky.**—T. B. Jones & Co., St. Louis, Mo., were awarded the contract for the construction of section B of the southern outfall sewer by the Sewer Commissioners, being the lowest of eleven, the figure for the mile or more of reinforced concrete sewer being \$296,524.13. The second lowest bidder was the Henry Bickel Company, which offered to do the work for \$336,680.33. This is the only one of the bidders whose main office is in Louisville. The third bid, of \$352,674.12, was made by the Abadie Construction Company, of St. Louis, Mo., who have had the contract for the placing of all wires underground in the downtown streets of the city. The T. B. Jones Company has had a branch office in Louisville for a number of years. Charles F. Fitch, of Louisville, has been their representative in the city, and is a member of the company. The company will furnish a bond of \$80,000 for the completion of the work, suitable to the Commissioners. In 462 days, although Mr. Fitch says it will be completed within a year. The probable date for the beginning of the work is the middle of January. The southern outfall sewer will run from South Louisville to a point below the outlet of Paddy's Run into the Ohio river. Section B, the second section of the sewer from the river, is the first to be constructed. Section A, the mouth of the sewer, will be undertaken next. The construction of this section will entail twice the expense of Section B.

**Baltimore, Md.**—Bids were opened, December 27, by the Board of Awards, for the construction of Baltimore's biggest bridge, the concrete structure over Gwynn's Falls, on the line of Edmondson avenue; thirteen concerns entering the competition, and the lowest bidder named a price about \$500 less than City Engineer Fendall's estimate of the cost of construction. The bridge will be the largest in the State of Maryland, and one of the largest in the country. It will be 60 feet wide and 430 feet long, and will require about 30,000 cubic yards of concrete. City Engineer Fendall asked for a lump sum bid for the whole job, but, in addition, he asked for unit prices on certain extras, which may or may not be needed. The lump sum bids of the various competitors were as follows: Baltimore Ferro Concrete Company, \$179,516; Reilly & Riddle, Roxborough, Pa., \$189,962.50; J. Henry Miller, \$189,987, if permitted to use the Hennebique system of con-

crete reinforcing; Johnson-Perin Contracting Company, \$194,858.19; C. B. Clark & Co., \$196,000; Ferro Concrete Construction Company, of Cincinnati, \$197,550; New York Continental Jewel Filtration Company, \$198,840; Cranford Paving Company, \$229,845; W. W. Lindsay & Co., \$234,000; Metropolitan Contracting Company, \$234,500; David Peoples, \$244,000; Filbert Paving and Contracting Company, \$244,200; Noel Construction Company, \$248,711. Mr. Fendall's estimate of the cost of the bridge was \$180,000. From the above figures it will be noticed that there is a difference between the lowest bidder and the highest bidder of nearly \$70,000.

**St. Paul, Minn.**—The Assembly has accepted three bids offered for city illumination; that of the Patterson Street Lighting Company, providing for lighting the suburbs by means of a gasoline boulevard lamp was accepted, as were the two bids of the St. Paul Gas Light Company to furnish both gas and electric lights.

**Morristown, N. J.**—After six months' delay, Mayor Bennell has signed the contract with J. B. Salmon for the construction of the sewage disposal system.

**Mount Holly, N. J.**—Contract was awarded, December 27, for the erection of a steel bridge over Crosswicks creek, in Burlington and Mercer Counties, for \$18,980, to Newton A. K. Bugbee, of Trenton.—Ernest D. Holeman, Clerk, Board of Chosen Freeholders.

**New Brunswick, N. J.**—The Board of Freeholders has opened bids for seven macadam roads, and awarded contracts as follows: Halfacre road, from Jamesburg to Englishtown, 17,600 feet, Rue & Fountain, of Old Bridge, for \$9,289.45; Livingston avenue road, in New Brunswick, 59,010 feet, Delaware Quarry and Construction Company, of Rocky Hill, \$10,287.72; Colonia road, from Colonia to Avenel, 8,416 feet, to J. S. Shanley & Co., of Newark, \$12,800; Plainsboro road, from the trolley line toward Cranbury, 50,300 feet, J. S. Shanley & Co., of Newark, \$6,624; State street, Perth Amboy, 7,148 feet, E. C. Humphry & Co., of Hackensack, \$8,161.30; River road, in New Brunswick, 8,775 feet, Delaware Quarry & Construction Company, of Rocky Hill, \$13,068.05; Main street, Woodbridge, toward New Brunswick, 9,200 feet, Pfeiffer & Little, of Woodbridge, \$16,123.30.

**Paterson, N. J.**—At the second opening of bids for furnishing a second-size fire engine, with rubber tires and all necessary up-to-date equipment, the American La France Company (Metropolitan), the Amoskeag Company, and the Mott Fire Engine Company bid \$5,975 each, and the Ahrens Fire Engine Company \$6,000; at the previous opening the companies in what is known as "The Trust" each bid \$6,057, and they were all rejected; the new bids were referred to the Fire Committee by the Police and Fire Board.

Bids were also opened for supplying the drugs for the Department of Charities and Corrections, and the contract was awarded to the lowest bidder, the Vanderbeek Drug Company.

**Summersville, N. J.**—Thomas Halahan has been awarded the contract for \$30,000 for constructing a sewer system. There will be two miles of 12-inch main pipe, with 6-inch laterals. A system of gutters will take surface water to the lake.

**New York, N. Y.**—The following are the bids opened, December 18, by Foster Crowell, Commissioner Street Cleaning, for removal of snow and ice in the Boroughs of Manhattan and Bronx, according to sections, the price given being per cubic yard: (a) Section 1, (b) Section 2, (c) Section 3, (d) Section 4, (e) Section 5, (f) Section 6, (g) Section 7, (h) Section 8, (i) Section 9, (j) Section 10, (k) Section 11, (l) Bronx; E. J. Duggan, (a) 33¼ cents, (b) 37 cents, (c) 37¼ cents, (d) 36¾ cents, (e) and (f) 34¼ cents, (g) 34¼ cents, (h) 39¼ cents; Thompson Brothers Company, 141st street and Fifth avenue, (k) 28 cents; J. T. Shaughnessy, 636 West 131st street, (a), (b) and (c) 36.9 cents, (d) and (e) 35.9 cents, (f) 36.9 cents, (g) and (h) 37.9 cents, (i) 31.9 cents, (j) and (k) 32.9 cents, (l) 35.9 cents; Wm. Bradley, Sixty-eighth street and North River, (b) 38 cents, (d) 39 cents; J. J. Doolley & Co., 157th street and Amsterdam avenue, (g) and (h) 37 cents, (j) 31 cents, (k) 32 cents; Williams Engineering & Contracting Company, 21 Park Row, (a), (b), (c) and (d) 42 cents, (e), (f), (g) and (h) 41 cents, (i) 34 cents, (j) 32 cents, (k) 30 cents, (l) 25 cents; Atlanta Contracting Company, 432 East Ninety-first street, (j) 37 cents; P. Reddy, Lenox avenue and 111th street, (h) 42 cents, (i) and (j) 35 cents, (k) 22 cents; J. W. Duncan, 285 East 134th street, (l) 19 cents; Canavan Brothers Company, 518 West Fifty-sixth street, (a) 63 cents, (b) and (d) 57 cents, (c) 64 cents, (e) and (i) 45 cents, (f) 55 cents, (g) 42 cents, (h) 57 cents, (j) and (k) 51 cents; Estate of P. H. Keahon, 108 Tenth avenue, (c) 49 cents; Thos. Crimmins Contracting

Company, 444 East Sixty-ninth street, (a) 64 cents, (b), (d) and (f) 53 cents, (c) 72 cents, (e) 54 cents, (g) and (h) 50 cents, (i) and (j) 39 cents, (l) 42 cents; T. Du Marco, 80 Mulberry street, (e) 37 cents, (h) and (k) 30 cents, (l) 26 cents; W. W. Masterson, 187th street and Washington avenue, (a) and (b) 43 cents; O'Grady Brothers, Brooklyn, (a) 49.9 cents; P. J. Kane, 933 East 150th street, (h) 32½ cents; T. T. Willigan, 1037 Fox street, (l) 24 cents; Chas. Schneider, 167th street and Findlay avenue, (l) 22 cents; Indelli & Conforti Company, 507 East 119th street, (j) 41 cents.

**Yonkers, N. Y.**—Council has awarded contracts for seven public works, amounting to about \$54,000. The bidders and the firms securing the contracts follow, the first named firms being the successful bidders: Building sewer in Oneida street (time 45 days), John Madigan, \$1,900; McDonald & Murray, \$1,937.55; Cody, Kelly & Hannifin, \$2,100; Charlton & Weston, \$2,385; Fred E. Gross, \$2,764; Russell & Farrell, \$2,973; O'Rourke Brothers, \$2,991; Carey & Connors, \$4,350; Michael J. Callahan, \$4,547; and Dennis Murphy, \$5,279.60.

Building sewer in Woodland avenue, from Oneida street, southerly (125 days): Cody, Kelly & Hannifin, \$4,360; Fred E. Gross, \$4,800; Charlton & Weston, \$5,100; McDonald & Murray, \$5,111.55; John Madigan, \$5,440; Dennis Murphy, \$5,500; Carey & Connors, \$5,950; O'Rourke Brothers, \$8,830; Russell & Farrell, \$8,239; Michael J. Callahan, \$8,900.

Building sewer in Woodland avenue, from Oneida street to Frederick avenue (100 days): John Madigan, \$6,999; Carey & Connors, \$7,250; Charlton & Weston, \$7,300; McDonald & Murray, \$7,347.80; Cody, Kelly & Hannifin, \$7,480; Fred E. Gross, \$7,500; Russell & Farrell, \$8,946; O'Rourke Brothers, \$9,558; Callahan & Dee, \$10,855; and Dennis Murphy, \$12,067.50.

Regulating and grading Ridge avenue (125 days): Thomas Grady, \$18,900; Joseph B. Pennell, \$19,450; Cody, Kelly & Hannifin, \$19,780; Fred E. Gross, \$20,000; Mangini & Canepi, \$20,200; Charlton & Weston, \$20,690; Dennis Murphy, \$20,968; James J. Hart, \$21,900; McDonald & Murray, \$22,792.25; Francesco Cianfaglione, \$23,270; and Callahan & Dee, \$24,689.

Regulating and grading Lake avenue (35 days): McDonald & Murray, \$2,376.85; Thomas Grady, \$2,400; James J. Hart, \$2,450; Francesco Cianfaglione, \$2,558; Charlton & Weston, \$2,650; Fred E. Gross, \$2,820; Dennis Murphy, \$2,940.50; O'Rourke Brothers, \$3,275; and Carey & Connors, \$4,350.

Grading Glenwood avenue (140 days): Joseph B. Pennell, \$17,378.60; Charlton & Weston, \$17,450; Fred E. Gross, \$17,600; Thomas Grady, \$18,000; McDonald & Murray, \$18,678.35; Mangini & Canepi, \$19,300; Francesco Cianfaglione, \$19,400; Dennis Murphy, \$19,500; Cody, Kelly & Hannifin, \$19,725; and James J. Hart, \$19,900.

Paving Stewart place (25 days): Charlton & Weston, \$2,240; Fred E. Gross, \$2,366; Kelly & Hannifin, \$2,400; Francesco Cianfaglione, \$2,400; Thomas Grady, \$2,500; O'Rourke Brothers, \$2,625; Dennis Murphy, \$2,645.50; and James J. Hart, \$2,700.

**Akron, O.**—Mathew McCourt, 1000 Rhodes avenue, has been awarded contract for the construction of a local sanitary sewer in Getz street.—C. H. Watters, Secretary, Board of Public Service.

**Ashville, O.**—Bids were opened for constructing system of arc lighting, as follows: For electrical distribution circuits, lowest bid \$1,535, highest bid \$2,200, accepted bid \$1,540; for arc lamps, lowest bid \$494, highest bid \$750, accepted bid \$511.50. All bids for copper wire were approximately the same, except the accepted bid contained a price at 20 cents per 100 pounds of weather-proof wire, above the bar base price at the time order was placed, and a discount of 40 per cent, and 5 per cent, from the bar base price of rubber covered wire at the time order was placed.—R. Fullerton, Columbus, Consulting Engineer.

**Lorain, O.**—The contract for the construction of a brick storm sewer in Penfield avenue, Sewer District No. 4, has been awarded to Faragher & Randall, of Lorain.—George N. Damon, Clerk.

**Marysville, O.**—Council has awarded to F. M. Kemp & Sons, of Middletown, contracts for paving East Sixth street, from Main to Chestnut street, and West Seventh street, from Court to Locust; the Engineer will recommend the use of Townsend block; five inches of crushed stone and one inch of sand will be used as a foundation; a number of alleys are also to be improved by paving during the coming year.

**Springfield, O.**—The bid of C. M. Long, for the construction of a high level intercepting sewer, has been accepted, at \$73,000.

**Altoona, Pa.**—Council has ratified contract with the International Power Company for a first-size Amoskeag fire engine for \$5,200.

**New Castle, Pa.**—Louis Myers has been awarded contract for winter avenue sanitary work, at \$454.39; engineer's estimate, \$422.88; and F. Mayberry sanitary sewer in Green street, for \$141.64, or \$11.60 less than the engineer's estimate; bids were not opened for the Fifth Ward storm sewer.

**North Belle Vernon, Pa.**—The contract for laying 280 feet of sewer on Henry and Speer streets has been awarded to J. L. Jobs for 35 cents per lineal foot, and for furnishing sewer pipe to the Wilson Hardware Company at 26½ cents per foot; other bids were as follows: For laying sewer, Marion Smock, 70 cents per foot on Henry street and 80 cents on Speer street; E. J. Guiler, 54 cents on Henry street and 70 cents on Speer street; for sewer pipe, E. J. Guiler, 35 cents per foot.

**Norfolk, Va.**—The contract for 2,000 water meter boxes was awarded, December 31, by the Board of Control to Sayre Brothers, at the rate of \$1.49 for each box. These boxes are to be used in connection with the installation of water meters in Norfolk, and it is expected an additional thousand or more will have to be contracted for at a later date.

**Reading, Pa.**—The Hawman Construction Company has been awarded contract for constructing storm water sewer in Canal street between Fourth and Fifth streets, for \$1,666.88.

**Seattle, Wash.**—The following contracts have been awarded by the Board of Public Works: Fourth avenue north, grading, Arthur Tong and Horace Allison, Seattle, Wash., \$5,885; West Ewing street, planing, S. D. Rardin, Seattle, Wash., \$2,195; Florentia street, grading, Holt & Jeffery, 310 Hinckley Block, Seattle, Wash., \$7,303; Roanoke street, et al., grading, Joe Frank, Seattle, Wash., \$15,088.40, as follows: clear and grub, \$1,000; earth work, 33,000 cubic yards, 28 cts.; curbs and gutters, 80,000 feet B. M., \$24; catch basins, 1 inlet, 6, \$65; single inlets, 6, \$35; box drain, 4,000 feet B. M., \$30; alley crossings, lumber, 350 feet B. M., \$24; Wallingford avenue, et al., grading, etc., Andrew Peterson & Co., 410 Washington Building, Seattle, Wash., \$26,928, as follows: clear and grub, 14 acres, \$125; earthwork, 52,000 cubic yards, at 32 cents; curbs and gutters, 131,000 feet B. M., \$23; box drains, 26,000 feet B. M., \$30; bridge, 13,000 feet B. M., \$30; 6-inch tile drain, 1,200 lineal feet, 50 cents; 3-inch tile drain, 600 lineal feet, 25 cents; relay wood walks, 9,000 lineal feet, 10 cents; bulkhead, lumber, 5,000 feet B. M., \$27; bulkhead, iron, 1,000 pounds, 7 cents.—R. H. Thomson, City Engineer.

**Spokane, Wash.**—The contract for a bridge across Rock creek, one-half mile south of Rockford, has been let by the County Commissioners to William Oliver, at \$3,500; the structure will consist of a 70-foot steel span and 195 feet of frame trestle.

## INCORPORATIONS

**Black Hawk Light, Heat and Power Company**, Marshall, Ill.; to operate light, heat and power plants; capital, \$1,000,000. Indiana Corporation.

**Jackson Light, Heat and Power Company**, 833 First National Bank Building, Chicago, Ill.; capital, \$25,000. Incorporators: John E. Baker, Leroy W. Holder and George R. Collins.

**Mill Creek Water Company**, Mill Creek, Pa.; to furnish water to the public in Mill Creek Township, from the waters of Gold stream; capital, \$5,000. Incorporators: A. C. Klopp, Jerome Klopp, of Sheridan; Edwin E. Wallace, of Newmanstown, and S. R. Ludwig, of Jersey City, N. J.

**Spencerport Water Company**, Spencerport, N. Y.; to supply villages, towns and hamlets in the State with water, and to carry off waste water and sewage. Incorporators: H. Morton, W. H. Link, Percy F. Coleman, Chauncey Brainard, Burton W. Brown, Melville Page and George M. Cole.

**Meadville Electric Lighting Company**, Meadville, Miss.; to supply light and power to Meadville and Eddiceton. Incorporators: Lee Rush, Henderson, Tenn., and others.

**Albion Water Company**, Albion, Pa.; to supply water to the public and private persons in Albion. Incorporators: T. H. Flower, J. R. Flower, and E. M. Flower.

**Monson Light and Power Company**, Monson, Mass.; gas and electricity; capital, \$50,000. President, H. W. Walte, Brookline; Treasurer, G. F. Barnard, Worcester; Clerk, F. H. Crane, Monson.

**Hoboken Trap Rock Company**, Newark, N. J.; prepare and market trap rock, cut stone, concrete, etc.; capital, \$50,000. Incorporators: Warren L. Jacobus, Monte T. Morehouse, Alfred B. Van Liew, Newark, N. J.

## PERSONALS

**AHEARN, J. T.**, Superintendent of Water Works, of Nashville, Tenn., for the past eight years, has resigned and calls attention of the Board of Public Works to the fact that while the revenues of the Department have doubled in that time the capacity of the plant has not been increased, and that the system has to be forced to its capacity to supply the city.

**BALLIETT, HAROLD J.**, Buffalo, N. Y., has been elected City Clerk, and has named Jacob A. Stauch as his deputy; George J. Haffa has been elected President of the Board of Aldermen, and Henry Adset Bull President of the Common Council.

**DORNIN, T. B.**, Chief Engineer of the Norfolk, Va., Water Department, was presented with a handsome buggy robe and a pair of driving gloves recently by the employees of his department. The presentation was made by First Assistant Engineer William F. Overton and Mr. Dornin replied in a brief but appropriate talk.

**FINK, A. J., JR.**, member of the Board of Public Works of Reading, Pa., recently elected to succeed himself, has been administered the oath of office by Mayor Gerber.

**GOLDSMITH, DR. CHARLES H.**, Park Ambulance Surgeon at Central Park, New York City for the past seventeen years has been dropped owing to the abolition of the service by Park Commissioner Henry Smith, on the ground that the changed conditions since its establishment a quarter of a century ago has made the service needless.

**GUILD, FREDERICK**, Ex-Judge, has been chosen President of the new appointive Board of Education of Newark, N. J.

**HAUSSLING, JACOB**, Mayor of Newark, N. J., has announced the following appointments: Charles G. Titsworth, as member of the Shade Tree Commission; Edward T. Ward, Library Trustee, and John F. Monahan, Adolph Fisch, and Dr. William Dimond, members of the Commission of Assessment for Public Improvements.

**HERRON, ROBERT**, Marshal of Police of Webb City, Mo., was recently presented with a handsome gold ring on the occasion of his forty-first birthday, Officer John M. Plummer making the presentation on behalf of his associates.

**HOWARD, JAMES W.**, Consulting Engineer on Roads, Streets and Pavements, 1 Broadway, New York City, who has devoted time for some years to military matters, has been promoted to be Colonel in the National Guard of New Jersey, he being a resident of Newark.

**HUGHES, WELCOME**, member of the Board of Public Works of Syracuse, N. Y., has been reappointed by Mayor Albert R. Kessinger for a term of four years, and H. C. Midlam, Clerk of the Board; Dr. J. O. Stranahan to the Board of Health vice Dr. H. G. Bartlett; Michael J. Larkin reappointed City Attorney and W. O. Jenks Clerk of the Board of Fire and Police Commissioners.

**JONES, DR. C. H.**, Dahlonega, Ga., has been elected Mayor of the city by a majority of one over W. B. Townsend, and W. E. Rickets, W. H. Jones and O. J. Lilly have been elected Councilmen, each for a period of two years.

**KINCAID, FREDERICK W.**, Utica, N. Y., has been appointed a member of the Park Board by Mayor Wheeler, in place of Charles A. Muller, who declined, and will serve with Charles A. Talcott and Henry A. Davis as a member of the first board.

**LAMBACH, CAPT. GEORGE F.**, Chairman of the Fire Committee of the Augusta, Ga., Council was presented recently at the office of Chief Frank G. Reynolds with a handsome gold-headed ebony cane, suitably engraved, by Mayor W. M. Dunbar, in behalf of members of the Fire Department.

**LEDERLE, A. J., JR.**, and Chambers and Hone, all of New York, have been appointed appraisers in proceedings to municipalize the plant of the Briarcliff Water Co., Briarcliff, N. Y.

**REYER, GEORGE**, recently Superintendent of Water Works, Mt. Vernon, N. Y., has accepted the position of Superintendent of Water Works at Nashville, Tenn.

**RIDGWAY, FRANK**, Director of the Department of Public Safety of Pittsburgh, Pa., and prominently known in connection with the United States Weather Bureau, died in a hospital in Pittsburgh recently of typhoid pneumonia. Before going to Pittsburgh ten years ago to take charge of the local weather bureau Mr. Ridgway was head of the bureau at Harrisburg, Pa. Several years ago he was granted an indefinite furlough by the Government and was appointed by Mayor Guthrie to be Director of the Pittsburgh Public Safety Department. The best part of Mr. Ridgway's life had been spent in the Signal Corps of the United States Army. He fought Indians in Arizona and New Mexico and operated the Government telegraph line through the sagebrush and on the cliffs of the Rocky Mountains when real danger lurked in the air. He was born at Newark, N. J., on December 20, 1859. He was a thirty-third degree Mason.

**SELLERS, DR. COLEMAN**, the famous engineer, is seriously ill at his home in Philadelphia, Pa. Dr. Sellers, who is in his eighty-first year, is suffering from a general breakdown. Dr. Sellers is well known as a consulting engineer in this country and abroad.

**SLOANE, JAMES RENWICK**, New York City, a member of the law firm of Strong and Cadwalader, 40 Wall street, has been appointed by Justice Betts of the State Supreme Court as a member of Aqueduct Commission No. 3, New York water works, in place of Henry Smith, of New York, resigned. The following were appointed Commissioners for Northern Aqueduct, No. 5: Byron Haffin Davis, lawyer of Saugerties, son of Surrogate and State Water Commissioner Charles Davis; Robert L. Cutting, lawyer, residence No. 241 West 100th street, New York City, and John M. Schoonmaker, farmer, formerly a School Commissioner and nephew of Judge Alton B. Parker.

**TRUITT, HARRY W.**, Superintendent of Rittenhouse Public Square, Philadelphia, Pa., who was removed by Director Public Safety Clay and Mayor Reyburn, has been ordered reinstated immediately by Judge Wilson in Common Pleas Court.

**WHITLOCK, BRAND**, Mayor of Toledo, O., recently delivered an address at Springfield, Ill., on "Municipal Government." Mayor Whitlock was formerly a resident of Springfield.

**WILSON, HENRY, JR.**, Street Commissioner of Bayonne, N. J., has been re-elected by Council, as have Francis W. Dalrymple, City Engineer and Surveyor; J. W. Empie, Treasurer; Robert A. Gardner, Collector; Frank Eley, Water Purveyor; Aries P. Brooke, Assessor; William J. Tomlin, Assistant City Clerk; Frederick Boorman, Overseer of the Poor. The terms of City Attorney Elmer W. Demarest, City Clerk William C. Hamilton, and Controller Charles E. Annett do not expire.

## TRADE NOTES

**Cast Iron Pipe Prices.**—Chicago, Ill. Trade is waiting the solution of the financial situation and the establishment of a fixed level of prices. No lettings of importance are reported. Quotations: Water pipe, per ton, 4-inch, \$33; 6 to 12-inch, \$32; 16-inch and up, \$31, with \$1 extra for gas pipe. San Francisco. Only a few small inquiries have been received, but a number of municipalities and water companies in California and other coast States are planning extensions which will require considerable pipe during the present year. Birmingham, Ala. Producers confident of the prospect for future business, but orders for first part of year likely to be small. Quotations: 4 to 6-inch, \$30; 8 to 12-inch, \$29; over 12-inch, average, \$26, with \$1 extra for gas pipe. New York. A number of fair-sized lettings recently reported from Southern cities. Carload lots, 6-inch, \$28.50 at tidewater.

**Pig Lead Prices.**—Good demand for lead. Prompt shipments from West were sold at \$3.50 to \$3.60 f. o. b. St. Louis and some sales were made at New York for \$3.75.

**Cling Surface.**—This is a liquid preparation manufactured by the Cling Surface Company, 1032 Niagara street, Buffalo, N. Y., to put on any kind of belt to keep it from slipping and give it the additional power which comes from a comparatively loose belt which wraps itself around a pulley and so increases the bearing surface. In the case of leather belts, the Cling Surface, which is always applied hot in a liquid state, is absorbed into the pores and gives the face a soft velvety surface which gives a perfect contact with the pulley. Other kinds of belts, such as plain cotton, camel hair, painted cotton, tar-filled, balata and rubber. The method of treating all kinds is much alike; after cleaning, Cling Surface is applied with a belt. A number of series of tests of belts treated with this material have been made by mechanical engineers. The records are published in a small book entitled "The Treatment of Belts and Ropes for Service and Profit," published by the company. One example given is that of a belt which wraps 212 degrees of the pulley instead of the 180 degrees usual with tight belts; in this case the recorded slip was at all times under two per cent. A number of cuts in the back of book taken from photographs of belt gearing where Cling Belt has been used show at a glance how loosely belts may be run.

**Garbage Cars.**—The Standard Steel Car Works, Butler, Pa., are building some garbage cars for use in hauling garbage from collecting plants in Pittsburgh to the reduction plant of a company near the city. The car is all steel and is of a new style, being the first all steel garbage car ever constructed. The present order is not a large one, but it is hoped that the cars will have sufficient points of advantage to insure their use in different parts of the country.

**Gas Plants Purchased.**—Syndicates of capitalists of Grand Rapids, Mich., are rapidly acquiring possession of Indiana gas plants. A deal was recently made transferring the plant at Valparaiso to C. B. Kelsey, H. O. Probasco and R. W. Griswold, of Grand Rapids, and Paul Ray, of Albion. Immediate possession has been given. The Michigan capitalists are making overtures for other Indiana plants.

## Lighting Companies Consolidate.

The Union Electric Light & Power Company of St. Louis, Mo., a subsidiary of the North American Company, has bought from E. M. Clark & Co., of Philadelphia, the Laclede Power Company of St. Louis. This gives the company control of all the light and traction companies of that city. The Laclede Power Company operates the Edison Electric Illuminating Company of St. Louis. The purchase was accomplished by the exchange of securities of the Union Electric Light & Power Company for the Laclede Power Company, which has \$1,000,000 of capital outstanding and pays 5 per cent. annually. Approximately \$3,000,000 of Union Light stock was reported to have been given in exchange. The Union Light Company had just increased its capital stock from \$10,000,000 to \$18,000,000.

**Gas Companies Reports.**—The annual returns published by gas and electric light and power companies of northern Worcester county show that every company either paid a dividend or reduced previous deficits, or made improvements or enlargements of their plants. The dividend paying companies and the amount of dividend paid are: Athol Gas & Electric Company, \$3,500; Clinton Gas Company, \$7,687.50; Fitchburg Gas & Electric Company, \$46,200; Gardner Electric Light Company, \$3,000; Leominster Electric Light & Power Company, \$4,800. The Gardner Gas, Fuel & Light Company showed a balance of \$8,257.50, and the Winchendon Electric Light & Power Company shows a total profit and loss balance of \$27,530.20.

**New Fuel.**—Mayor Colas, chief of the Dunkirk, N. Y., Fire Brigade, has invented a fuel which he calls "Charbonette." The fuel is made of inexpensive materials and is said to cost about two-thirds as much as coal. It is said to light easily, to give out no smoke, to leave little or no ash, to leave no mark when handled and to have no unpleasant odor. A factory may be established at Dunkirk to produce 40,000 tons annually.

**Calendars Received.**—From the Gulf Refining Company, Pittsburg, Pa., a very attractive illustrated calendar.

From "The Call," Paterson, N. J., a serviceable calendar for office use. The figures are very clear.

From the Pittsburg Meter Company a large calendar for office use.

From the "Springfield Republican," Springfield, Mass., a comparatively small wall calendar for office or home use.

From the Chelsea Exchange Bank, Thirty-fourth street and Eighth avenue, New York, a wall calendar with cut of the bank building.

## WANTS

A HIGH CLASS civil engineer is open for engagement; large experience on the construction of public and private works, experienced on sewerage, water works, water powers, railroads, bridges, buildings, dams, canals, foundations, and all kinds of reinforced concrete construction; competent to make surveys, designs, plans, estimates, reports, and specifications, and to superintend construction. Apply to Chief Engineer, 6547 Woodlawn avenue, Suite 1, Chicago. (2-3)

WE can interest any man with municipal, civil, general or special experience, capable of earning from \$600 to \$5,000 in technical work; write for information and location of nearest Hapgoods, 305 Broadway, New York, or 1010 Hartford Bldg., Chicago.

YOUNG MAN, well acquainted among concrete contractors and city engineers in East and Middle West, wishes position selling supplies, etc. Howard Loxterman, 804 Ivy street, Pittsburg, Pa.

## Proposals

## STREET PAVING

Billings, Mont., November 7, 1907.

Sealed proposals for the paving with shale brick of certain streets of the City of Billings, Montana, described in the resolution creating Special Improvement District No. 21, will be received by the City Council up to 8 o'clock p. m. of February 4, 1908, addressed to the undersigned, and endorsed: "Proposals for Paving."

The work for which proposals are invited consists of, approximately, 6,305 square yards of shale brick pavement, the foundation for which is otherwise provided for.

Each proposal must be accompanied by a certified check for \$1,000 on some responsible bank in the City of Billings, and made payable to said city. The successful bidder must enter into an undertaking in the sum of \$2,000, with approved sureties. Plans and specifications are on file in this office.

The right is reserved to reject any and all bids.

J. D. MATHESON,

City Clerk.

## HIGH SCHOOL BUILDING

## Notice to Contractors

Sealed proposals will be received until 3 o'clock p. m. January 20, 1908, for the construction of a high school building, to be erected by the city of Richmond, Va., in accordance with plans, specifications and details furnished by Charles K. Bryant, Architect, 1014 East Main street, Richmond, Va.

Copies of plans can be had upon application to the architect.

Bids to be addressed to Chairman of School Board, and left with Clerk C. P. Walford, Room 2, fourth floor, City Hall, Richmond, Va. The School Board reserves the right to reject any and all bids. When contract is awarded, the successful bidder will be required to furnish satisfactory bond in 25 per cent. of amount of contract.

## LAYING WATER PIPE

Phoenix, Ariz.

Sealed proposals will be received by the Superintendent of the Water Department at the City Hall, Phoenix, Arizona, until 4 o'clock of January 10, 1908, for laying cast-iron water pipe.

A certified check for 5 per cent. of the amount of the bid, made payable to Frank Thomas, City Recorder, must accompany each proposal.

Specifications may be obtained upon application.

The Superintendent reserves the right to reject any and all bids, and to waive any informalities in any proposal.

ROBT. A. CRAIG,

Superintendent.

## ELECTRIC LIGHT BONDS

Bids will be received by the Town Council of Dadeville until noon January 10, 1908, for the purchase of \$8,500 of bonds to be issued by the town of Dadeville to pay for additional equipment and for the improvement of the municipal electric light and power plant. Denominations of \$500 each, and interest payable semi-annually at rate of 5 per cent., and due 30 years after date. Value of plant more than \$30,000; present indebtedness \$10,000; monthly gross revenue \$350; monthly operating expense \$150. Operated by water power, and able to generate 200 more horsepower than is at present used.

The right to reject any and all bids reserved.

For further information apply to

J. B. RYLAND, Mayor,  
Dadeville, Ala.

## IMPROVEMENT BONDS

Will be offered for sale at the Council Chamber of the city of Millen, Ga., on the 21st day of January, 1908, thirty thousand dollars of just-within-thirty-year city of Millen public improvement 5 per cent. bonds of the denomination of one thousand dollars each.

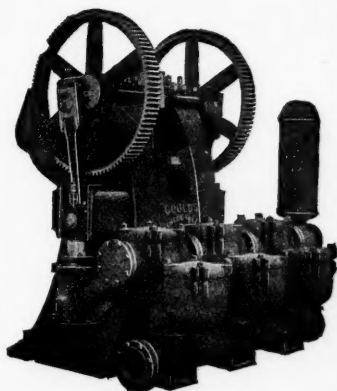
Bids must be accompanied by certified check of one thousand dollars, and the city of Millen reserves the right to reject any and all bids.

H. Q. BELL,

Mayor.

C. V. DeLOACH,

Clerk of Council and Treasurer.

**ON ACCOUNT**

Of their extremely low cost of operation and the small amount of attention required

**GOULDS EFFICIENT POWER PUMPS**

are growing in favor wherever they are installed. Let us send you Catalog of Pumps for every service

**THE GOULDS MFG. CO.**  
Seneca Falls, N. Y.  
New York, Boston, Pittsburg, St. Louis

**CENTRIFUGAL PUMPS . . .**

We are the oldest and largest builders of this class of Pumps in this country.

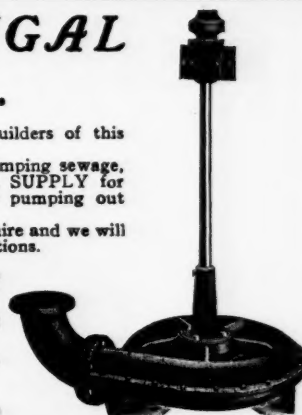
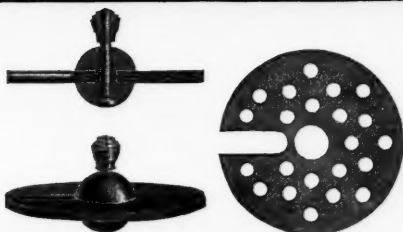
They are specially adapted for pumping sewage, ditch or trench work, for WATER SUPPLY for cities, towns and villages, and for pumping out flooded cellars.

Write us the exact service you require and we will make recommendations to suit conditions.

**MORRIS MACHINE WORKS** BALDWINVILLE, N. Y.

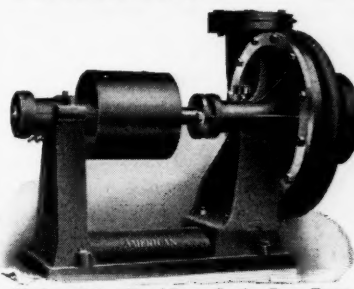
NEW YORK OFFICE: 39-41 Cortlandt St.

Henion & Hubbell, Agents  
61-69 N. Jefferson St., CHICAGO

**"LAMBERT" THE PERFECT WATER METER**

All sizes from 5-8 of an inch to 6 inches fitted with patented Hard Rubber Discs reinforced with a perforated internal Steel Plate.

**THOMSON METER CO.** 79 Washington St., BROOKLYN, N. Y.

**"American" Centrifugal PUMPS**

For City Water Works, Ditch and Trench Work, Irrigation or Reclamation Work.

Or any Water Pumping Proposition requiring economy and efficiency.

Sold under a positive guarantee of mechanical efficiency.

Manufactured by

**THE AMERICAN WELL WORKS, Aurora, Ill., U. S. A.**  
CHICAGO, First National Bank Bldg. NEW YORK, 2-4 Stone St.  
DENVER, Colo., Morse Bros. Machine and Supply Co.  
DALLAS, Texas, SAN FRANCISCO, Cal., 305 Market St.  
JOPLIN, Mo. NEW ORLEANS, La., J. H. Menge & Co.

**ANNOUNCEMENT**

THE

**CHICAGO CONCRETE MACHINERY CO.**

ANNOUNCE

THAT THEIR NEW GENERAL CATALOG

FOR 1908

IS NOW READY FOR DISTRIBUTION

CONCRETE MIXERS, CONCRETE CONVEYORS

ROCK CRUSHERS, ROAD GRADERS

IRRIGATION GRADERS, DUMP BOXES

WHEELBARROWS, CONCRETE CARTS

MAILED FREE

20 SOUTH CANAL STREET, CHICAGO

# REINFORCED CONCRETE SEWER PIPE



This Illustration Tells Its Own Story

To Engineers who contemplate putting in sewers we will be glad to send copies of our handsome catalogue containing illustrations of work done.

## REINFORCED CONCRETE PIPE CO.

JACKSON, MICHIGAN

### Stronger Than Any Other Pipe

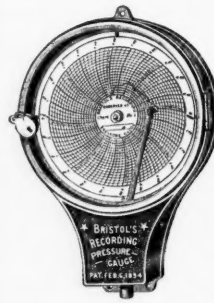
- ¶ No expensive forms or centerings are necessary, as with brick or monolithic concrete.
- ¶ Possesses elasticity, enabling it to withstand stresses which monolithic concrete could not.
- ¶ Absolutely smooth inside, permitting a rapid flow of sewage.
- ¶ It is made on the ground by the opening and can be thoroughly inspected before laid so that every piece is perfect, no matter how thick or thin the wall is.

## SANITARY STREET FLUSHING MACHINE CO.

MANUFACTURERS

CARLETON BUILDING

ST. LOUIS, U.S.A.



## IT PAYS

to know what the pressure will be during heavy draught, as at times of fires.

BRISTOL'S  
REG. U.S. PAT. OFFICE

### RECORDING GAUGES

are invaluable for this service, and enable a Supt. to give indisputable evidence as to efficiency of water system at all times. Our PORTABLE GAUGE is very convenient for TEST WORK.

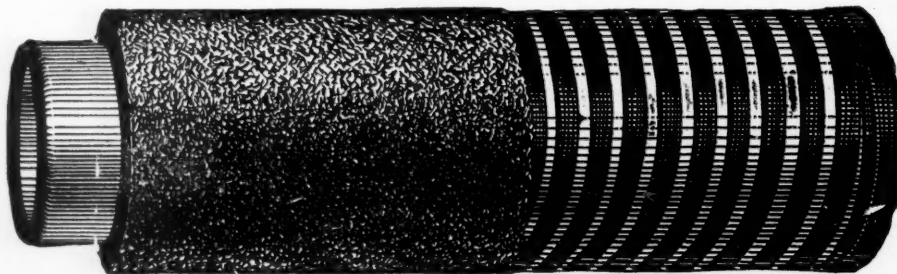
Get Catalog BA from nearest office

NEW YORK  
CHICAGO

The Bristol Company,

WATERBURY  
CONN.

## WYCKOFF MACHINE MADE



## WOOD PIPE

Cheaper than wrought or cast iron pipe, more durable than wrought iron or steel. Its capacity does not decrease from continued use. It can be laid nearer the surface than metal pipe. It can be laid in wet trenches. Does not burst if water freezes. It is being used for WATER SUPPLY by progressive engineers.

WYCKOFF SUPPLY COMPANY, ELMIRA, NEW YORK